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CATALOGUE

OF

HYMENOPTEROUS INSECTS

IN

THE COLLECTION

OF THE

BRITISH MUSEUM.

BY

FREDERICK SMITH, V.P. ENT. SOC.

PART VII.

DORYLIDÆ AND THYNNIDÆ.

LONDON:
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PREFACE.

The object of the present Catalogue is to give a complete list of all the known genera and species of Dorylidæ and Thynnidæ, including those which have been previously recorded, together with descriptions of such as appear to be hitherto undescribed.

The letters B.M. in the margin indicate the species contained in the Collection of the British Museum.

JOHN EDWARD GRAY.

1st June, 1859.

CATALOGUE

OF

HYMENOPTERA.

Div. II. ACULEATA.

Tribe HETEROGYNA, *Latr.*

Family 5. DORYLIDÆ, *Shuck.*

Genus 1. DORYLUS.

Vespa, pt., *Linn. Mus. Lud. Ulric. Reg.* p. 409 (1764).
Mutilla, pt., *Linn. Syst. Nat.* i. 967 (1766).
Dorylus*, *Latr. Hist. Nat. Ins.* xiii. 260 (1802).

Sect. 1.—*Peduncle cup-shaped, much smaller than the second segment.*

1. Dorylus helvolus. —— B.M.

Vespa helvola, *Linn. Mus. Lud. Ulric. Reg.* 412. 5.
Mutilla helvola, *Linn. Syst. Nat.* i. 967. 8.
Fabr. Mant. i. 313. 18.
Christ. Naturg. der Bienen, &c., 151.
Dorylus helvolus, *Fabr. Ent. Syst.* ii. 365. 1; *Syst. Piez.* 427. 1.
Coqueb. Icon. dec. 2. pl. 16. f. 1.

* This genus at present consists of males only. Dr. Savage considers the other sexes as constituting the genus *Anomma*; this, however, requires confirmation.

Dorylus helvolus, *Latr. Hist. Nat.* xiii. 260; *Gen. Crust. et Ins.* iv. 124.
Shuck. Ann. & Mag. Nat. Hist. 1st ser. v. 315. 2 (1840).
Westw. Arc. Ent. i. 79. 2.

Hab. Cape of Good Hope (Port Natal).

2. Dorylus affinis. B.M.

Dorylus affinis, *Shuck. Ann. & Mag. Nat. Hist.* 1st ser. v. 316. 3 (1840).
Westw. Arc. Ent. i. 79. 3.

Hab. Africa (Gambia).

Sect. 2.—*Peduncle cup-shaped, nearly as large as the following segment.*

3. Dorylus nigricans. B.M.

Dorylus nigricans, *Illig. Mag.* i. 188. 18.
Fabr. Syst. Piez. 427. 2.
Latr. Gen. Crust. et Ins. iv. 124; *Nouv. Dict. d'Hist. Nat.* 2nd ed. 9. 556.
Shuck. Ann. & Mag. Nat. Hist. 1st ser. v. 271. 1 (1840).
Westw. Arc. Ent. i. 79. 1.

Hab. Sierra Leone.

Sect. 3.—*Peduncle quadrate; mandibles slender and much acuminated.*

4. Dorylus glabratus. B.M.

Dorylus glabratus, *Shuck. Ann. & Mag. Nat. Hist.* 1st ser. v. 317. 4 (1840).
Westw. Arc. Ent. i. 79. 4.

Hab. Africa (Gambia).

5. Dorylus Juvenculus. B.M.

Dorylus Juvenculus, *Shuck. Ann. & Mag. Nat. Hist.* 1st ser. v. 318. 5 (1840).
Westw. Arc. Ent. i. 80. 5.

Hab. Barbary.

6. Dorylus labiatus. B.M.

Dorylus labiatus, *Shuck. Ann. & Mag. Nat. Hist.* 1st ser. v. 319. 6 (1840).
Westw. Arc. Ent. i. 80. 6.

Hab. India (Poonah and Assam).

7. Dorylus Hindostanus. Plate I. fig. 1.

Length 1 inch.—Rufo-fuscous, smooth, and covered with fine glittering downy pile: mandibles slender and acuminate at the apex; the face, base of the mandibles, the coxæ, and apex of the abdomen with long curling pale yellow hair; face and forehead slightly prominent; the ocelli in an equilateral triangle, the face deeply sulcated in front of the anterior one; the antennæ setaceous, the scape about half the length of the flagellum. Thorax gibbous in front, the scutellum transverse; the metathorax abruptly truncated, the margin of the truncation fringed with pale hairs; wings hyaline, nervures brown, the radial nervure extending a little beyond the inner angle of the marginal cell; the legs castaneous. Abdomen elongate and cylindrical, the peduncle quadrate-convex; compressed beneath into a subtriangular form; the peduncle much narrower than the following segment; the terminal segment very pilose.

Hab. India (Punjaub).

This species is most closely allied to the *D. Juvenculus*, Shuck., but may be distinguished by the different form of the under side of the peduncle; its forehead is less convex, and its peduncle narrower in proportion to the following segment.

Sect. 4.—*Peduncle quadrate; mandibles broad and nearly triangular.*

8. Dorylus orientalis. B.M.

Dorylus Orientalis, *Westw. Proc. Zool. Soc.* 1835, p. 72.
Shuck. Ann. & Mag. Nat. Hist. 1st ser. v. 320. 7 (1840).
Westw. Arc. Ent. i. 80. 7.

Hab. India (Bengal).

9. Dorylus longicornis. B.M.

Dorylus longicornis, *Shuck. Ann. & Mag. Nat. Hist.* 1st ser. v. 321. 8 (1840).
Westw. Arc. Ent. i. 80. 8.

Hab. India (Bengal).

10. Dorylus attenuatus.

Dorylus attenuatus, *Shuck. Ann. & Mag. Nat. Hist.* 1st ser. v. 322. 9 (1840).
Westw. Arc. Ent. i. 80. 9.

Hab. Africa (Gambia?). (Coll. F. Smith.)

11. Dorylus atriceps.

Dorylus atriceps, *Shuck. Ann. Nat. Hist.* 1st ser. v. 323. 10 (1840).
Westw. Arc. Ent. i. 80. 10.

Hab. Africa (Gambia). (Coll. F. Smith.)

Sect. 5.—*Peduncle cup-shaped, as large as the following segment; the mandibles broad and nearly triangular.*

12. Dorylus atratus.

Length 9 lines.—Black, with a silky brown pubescence; elongate and cylindrical: head as wide as the thorax; the ocelli in a triangle on the vertex, which is very convex; antennæ short and setaceous, the scape more than half the length of the flagellum. Thorax: the mesothorax with an impressed longitudinal line on each side, two-thirds of its entire length, terminating at the base of the scutellum; wings blackish brown, with a slight violet iridescence, the nervures black; the recurrent nervure inserted a little beyond the middle of the first submarginal cell; femora elongate, triangular, much narrowed at the apex. Abdomen cylindrical; the peduncle cup-shaped, nearly as large as the second segment, its posterior margin rounded; beneath compressed into an angular form, and densely pubescent.

Hab. Old Calabar. (Coll. F. Smith.)

Genus 2. RHOGMUS.

Rhogmus, *Shuck. Ann. & Mag. Nat. Hist.* 1st ser. v. 323. 4 (1840).

1. Rhogmus fimbriatus. Plate I. fig. 2. B.M.

Rhogmus fimbriatus, *Shuck. Ann. & Mag. Nat. Hist.* 1st ser. v. 325. 1 (1840).
Westw. Arc. Ent. i. 80. 1.

Hab. Africa (Gold Coast; Gambia).

Genus 3. LABIDUS*.

Labidus, *Jurine, Hym.* p. 282 (1808).

Sect. 1.—*Peduncle of the abdomen subtriangular and concave above.*

1. Labidus Fargeavii.

Labidus Fargeavii, *Shuck. Ann. Nat. Hist.* 1st ser. v. 198. 1 (1840).

* The females of this genus are not known. Mr. Shuckard has indicated their probable connexion with the genus *Typhlopone*.

Labidus Fargeavii, *St. Farg. Hym.* i. 229, nec *Jurine*.
Westw. Arc. Ent. i. 74. 1.

Hab. Brazil (St. Catherine).

2. Labidus Jurinii.

Labidus Jurinii, *Shuck. Ann. Nat. Hist.* 1st ser. v. 198. 2 (1840).
Westw. Arc. Ent. i. 75. 3.

Hab. South America (Demerara); Brazil.

3. Labidus Burchellii. Plate I. fig. 3.

Labidus Burchellii, *Westw. Arc. Ent.* i. 74. 2. pl. 20. f. 1.

Hab. Brazil (Santos).

4. Labidus Latreillii.

Labidus Latreillii, *Jurine, Hym.* p. 282.
Shuck. Ann. & Mag. Nat. Hist. 1st ser. v. 199. 3 (1840).
Westw. Arc. Ent. i. 75. 4.
Latr. Gen. Crust. et Ins. iv. 123; *Nouv. Dict. d'Hist. Nat.* 2nd ed. xvii. 141.

Hab. Brazil; Demerara?; Cayenne.

5. Labidus Servillei.

Labidus Servillei, *Westw. Arc. Ent.* i. 75. 5. pl. 20. f. 2.

Hab. Brazil (Para).

6. Labidus atriceps.

Length 7 lines.—Body reddish, pubescent; head black; the face anteriorly, and the ridges between the antennæ at their base, the mandibles and antennæ, rufo-testaceous; the ocelli of glassy brightness, and placed in a triangle on the vertex. The anterior wings fulvo-hyaline, with the nervures brownish red; the thorax punctured above, not very closely so; on each side an impressed line runs from the scutellum nearly to the anterior margin of the mesothorax; the posterior tibiæ as wide as the femora, narrowed at the base, two-thirds of their length towards the apex of the same width, and narrowed from thence to the base; the basal joint of the tarsi broadest at the base. Abdomen curved; the peduncle of a subtriangular shape above, concave, with the margins raised, and smooth and shining. The insect covered with a fulvous pubescence.

Hab. Brazil (Ega, on the Amazons).

I have scarcely a doubt of this being the *Labidus Latreillii*, although in one particular it somewhat differs. In the original description of the 'Nouveau Dictionnaire d'Hist. Nat.,' the tibiæ

are described as increasing in thickness to their extremity, the spur at their apex broad at the base, as is also the basal joint of the tarsi. In the insect described, the tibiæ are of equal thickness two-thirds of their length; in other respects they perfectly agree.

7. Labidus morosus.

Male. Length 9 lines.—Brown-black, covered with fine brown silky pubescence: the ocelli placed in a curve on the vertex, not smaller than in the other species, the space between the posterior pair smooth and shining and slightly concave; the antennæ, mandibles, and legs rufo-testaceous; the mandibles long and very slender. Thorax oblong-ovate, gibbous in front and at the scutellum; wings brown, the nervures brown-testaceous; the marginal cell acute at the base and apex, extending beyond the second submarginal cell one-third of its length; the second submarginal cell narrow, receiving the recurrent nervure one-third from its base; the legs slender, covered with long hair. Abdomen with the margin of the segments slightly constricted, and rufo-testaceous; the apex of the abdomen and the ventral segments with long fine hair; the peduncle transverse; concave above, the lateral posterior angles prominent and obtuse; the apical segment compressed vertically; the apical ventral plate furnished with two acute, stout, curved spines.

Hab. Mexico.

This species in some respects resembles *Labidus D'Orbignii*, described in Shuckard's 'Monograph;' but the size of the ocelli, form of the peduncle, and different neuration of the wings appear to characterize a distinct species.

8. Labidus amplipennis.

Male. Length 7 lines.—Rufo-testaceous: the head fuscous; the ocelli large, glassy bright, placed on the hinder margin of the vertex in a slight curve; the face anteriorly, the labrum, and antennæ rufo-testaceous. Thorax very gibbous in front, as also at the scutellum; the metathorax perpendicularly truncate; wings ample, one-fourth longer than the entire insect; the nervures testaceous; the marginal cell lanceolate, acute at the apex, nearly as long as the first and second submarginals united; the first submarginal oblique-quadrate, its width half that of the lower margin of the second submarginal, the latter narrowed towards the marginal cell; the legs slender. Abdomen shining; the peduncle quadrate, slightly concave above, and of the same width as the abdomen; the apical segment fusco-ferruginous.

Hab. Bogota.

9. Labidus pilosus. B.M.

Length 9½ lines.—Rufo-testaceous: the head blackish, excepting the anterior margin of the face, the mandibles, and antennæ, which are of the same colour as the body. The thorax of a darker colour above than the abdomen, punctured and shining; the sides, the metathorax, and the legs with long pale pubescence; the wings hyaline, the nervures ferruginous; the mesothorax not gibbous in front. Abdomen covered with dense shining silky pile; the peduncle transverse, subtriangular, with the sides slightly rounded.

Hab. Brazil (St. Paul's). (Coll. H. W. Bates.)

10. Labidus Mexicanus.

Length 6 lines.—Pale rufo-testaceous, covered with pale shining pubescence: eyes large, black, and prominent; the ocelli glassy bright; on each side of the anterior one an elevated carina, which passes between the antennæ to the anterior margin of the face, forming a deep smooth channel; the antennæ shorter than the thorax, stout, and tapering to a point at their apex. Thorax very gibbous in front and at the scutellum; the wings wanting. Abdomen: the margins of the segments slightly constricted; the peduncle transverse, the lateral margins not elevated, slightly convex in the middle.

Hab. Mexico (Orizaba).

Sect. 2.—*Peduncle of the abdomen more or less convex, transverse-quadrate.*

11. Labidus Illigeri.

Labidus Illigeri, *Shuck. Ann. & Mag. Nat. Hist.* 1st ser. v. 397. *Append.* (1840).
Westw. Arc. Ent. i. 76. 8.

Hab. Brazil.

12. Labidus Hartigii.

Labidus Hartigii, *Westw. Arc. Ent.* i. 75. 6. pl. 20. f. 3.

Hab. Brazil (Rio Janeiro and Sapé).

13. Labidus Esenbeckii.

Labidus Esenbeckii, *Westw. Arc. Ent.* i. 75. 7. pl. 20. f. 4.

Hab. Brazil (Rio Vendinha).

14. Labidus Halidaii.

Labidus Latreillii, *Halid. Linn. Trans.* xvii. 328 (nec *Jurine*).
Labidus Halidaii, *Shuck. Ann. & Mag. Nat. Hist.* 1st ser. v. 200. 4 (1840).
Westw. Arc. Ent. i. 76. 9.

Hab. Brazil (St. Paul's). (Coll. W. W. Saunders, Esq.)

15. Labidus Swainsonii.

Labidus Swainsonii, *Shuck. Ann. & Mag. Nat. Hist.* 1st ser. v. 201. 5 (1840).
Westw. Arc. Ent. i. 76. 11.

Hab. Brazil (Para); Mexico. (Coll. F. Smith.)

16. Labidus Fonscolombii.

Labidus Fonscolombii, *Westw. Arc. Ent.* i. 76. 10.

Hab. Brazil.

17. Labidus Hopei.

Labidus Hopei, *Shuck. Ann. & Mag. Nat. Hist.* 1st ser. v. 258. 6 (1840).
Westw. Arc. Ent. i. 76. 12.

Hab. Brazil.

18. Labidus D'Orbignii.

Labidus D'Orbignii, *Shuck. Ann. & Mag. Nat. Hist.* 1st ser. v. 259. 7 (1840).

Hab. South America.

19. Labidus Gravenhorstii.

Labidus Gravenhorstii, *Westw. Arc. Ent.* i. 76. 13.

Hab. Brazil (Rio Vendinha).

20. Labidus Spinolæ.

Labidus Spinolæ, *Westw. Arc. Ent.* i. 77. 14.

Hab. Brazil (Meia Ponte, Caisara).

21. Labidus Guerinii.

Labidus Guerinii, *Shuck. Ann. & Mag. Nat. Hist.* 1st ser. v. 397. *Append.* (1840).
Westw. Arc. Ent. i. 77. 15.

Hab. South America.

22. Labidus Walkeri.

Labidus Walkeri, *Westw. Arc. Ent.* i. 77. 17.

Hab. Brazil (Meia Ponte).

23. Labidus Klugii.

Labidus Klugii, *Shuck. Ann. & Mag. Nat. Hist.* 1st ser. v. 260. 8 (1840).
Westw. Arc. Ent. i. 77. 18.

Hab. St. Vincent's.

24. Labidus Romandii.

Labidus Romandii, *Shuck. Ann. & Mag. Nat. Hist.* 1st ser. v. 261. 9 (1840).

Hab. Brazil.

25. Labidus Erichsonii.

Labidus Erichsonii, *Westw. Arc. Ent.* i. 77. 19.

Hab. Brazil.

26. Labidus Pertii.

Labidus Latreillii, *Perty, Del. An. Art.* p. 138. t. 27. f. 11 (nec *Jurine*).
Labidus Pertii, *Shuck. Ann. & Mag. Nat. Hist.* 1st ser. v. 262. 11 (1840).
Westw. Arc. Ent. i. 78. 21.

Hab. Brazil.

Genus 4. ÆNICTUS*.

Enictus, *Shuck. Ann. & Mag. Nat. Hist.* 1st ser. v. 266 (1840).

1. Ænictus ambiguus.

Enictus ambiguus, *Shuck. Ann. & Mag. Nat. Hist.* 1st ser. v. 268 (1840).
Westw. Arc. Ent. i. 79. 1.

Hab. India (Poonah). (Coll. F. Smith.)

2. Ænictus certus. Plate I. fig. 4.

Enictus certus, *Westw. Arc. Ent.* i. 79. 2, and *Mus. Linn. Soc.*

Hab. ——? (Coll. Linn. Soc.)

* Males only of this genus are known.

3. ÆNICTUS INCONSPICUUS. Plate II. fig. 15*a*.

Ænictus inconspicuus, *Westw. Trans. Ent. Soc. Lond.* iv. 238. pl. 14. figs. 4, 4 *a–g*.

Hab. South Africa. (Coll. W. W. Saunders, Esq.)

4. ÆNICTUS PUBESCENS.

Length 3½ lines.—Rufo-testaceous, densely clothed with pale pubescence: the head black and shining; the mandibles and antennæ rufo-testaceous; the ocelli in a curve on the vertex, and situated on the sides of a central elevation; the mandibles long and curved. The thorax obscure ferruginous; wings hyaline and iridescent, the nervures and stigma dark brown. Abdomen densely clothed with long decumbent silky pubescence; the peduncle deeply concave above and channeled in the middle, slightly rounded at the sides, the peduncle of the same width as the second segment, the terminal segment obtuse.

Hab. Northern India. (Coll. F. Smith.)

This species closely resembles *Ænictus ambiguus*, from which it differs in being covered with dense long pale silky pubescence; the anterior margin of the prothorax is much more obtuse, and is notched in the middle; the peduncle is of a different form, for which refer to Plate II. fig. 17.

Family 6. THYNNIDÆ, *Erichs.*

Genus 1. THYNNUS.

Thynnus, *Fabr. Syst. Ent.* 360 (1775).
Myzine, pt., *Oliv. Encycl. Méth.* viii. (1811).
Tiphia, pt., *Fabr. Syst. Ent.* 354 (1775).
Myrmecodes, *Latr. Nouv. Dict. d'Hist. Nat.* xx. 2nd ed.
Mutilla, pt., *Lamarck, Hist. Nat.* iv. 2nd ed.
Thynnoides, *Guér. Voy. Coq. Zool.* ii. 232 (1830).
Agriomyia, *Guér. Voy. Coq. Zool.* ii. 218 (1830).
Lophocheilus, *Guér. Voy. Coq. Zool.* ii. (1842).
Enteles, *Westw. Arc. Ent.* ii. 143 (1843–45).
Catocheilus, *Guér. Mag. Zool.* (1842).
Erione, *Westw. Arc. Ent.* ii. 144 (1843–45).

In this Catalogue the *Thynnidæ* are divided generically on the differences of neuration in the anterior wings. After a careful examination of several extensive collections of *Thynnidæ*, that in particular of the British Museum, we find that the palpi differ in the number of joints in the males and females of the

same species; the wing-system alone, therefore, appears to form distinctive and satisfactory divisions of this remarkable family of Hymenoptera.

The immense variety of form observable in the apterous females of this genus renders it impossible to found any generic divisions upon such peculiarities. The relative proportions of the head, thorax, and abdomen vary greatly, the former being sometimes wider than the thorax, sometimes of the same width, and frequently narrower. The thorax is oblong-quadrate, narrowed anteriorly into a neck, or deeply strangulated in the middle, with various intermediate gradations. The abdomen, although usually wider than the head and thorax, is sometimes of the same width.

The very great dissimilarity existing between the winged males and the apterous females renders it a matter of impossibility to unite the sexes of a species with a certainty of correctness, without a positive observation of the living insects; but much has been done in this respect by Robert Bakewell, Esq., for some years resident in Australia, whose collection has been most liberally placed at my disposal for examination, and from which many new species have been presented to the Museum Collection.

Species of Australia.

1. Thynnus dentatus.

Thynnus dentatus, *Fabr. Syst. Ent.* p. 360. 1 ♂; *Ent. Syst.* ii. 244. 1; *Syst. Piez.* p. 231. 1.
Latr. Gen. Cr. et Ins. iv. pl. 3. f. 1, & tom. i. t. 13. f. 2, 3, 4 ♂; *Encycl. Méth.* p. 382. f. 8.
Guér. Voy. Coq. Zool. ii. 222.
Klug, Berl. Abhandl. (1842) 15. 1.
Don. Ins. New Holl. pl. 41. f. 1.
Rœmer, Gen. Ins. t. 35. f. 8.
Lamarck, Anim. sans Vert. t. 4. f. 109.

Hab. Australia.

The Fabrician description of this species is not sufficiently minute in structural details to distinguish the insect amongst the multitude of species now brought together:—

"Statura et magnitudo *Vespæ vulgaris*. Antennæ porrectæ, fuscæ, basi piceæ. Labium flavum, dentatum. Maxillæ flavæ, apice nigræ. Thorax niger, striga antica, lobo postico scutelloque flavis. In medio dorsi lineolæ duæ impressæ, abbreviatæ. Abdomen glabrum, atrum, primo segmento basi, 2, 3, 4, punctis duobus flavis, reliquis immaculatis. Anus denticulis septem parvis serratus."—*Fabr. Syst. Ent.*

Male. Length 9½ lines.—Black: the mandibles, labrum, clypeus, orbits of the eyes interrupted at their summit, and a V-shaped mark at the base of the antennæ, yellow; the scape yellow in front; the flagellum ferruginous, slightly fuscous above; the tips of the mandibles black; the anterior margin of the clypeus rounded, and a short stout tooth at its lateral angles. The anterior and posterior margins of the prothorax yellow; the scutellum and metathorax yellow, the former fuscous at its base; the wings hyaline, with their extreme base brown; the legs ferruginous, the tarsi fuscous. Abdomen: the truncation of the base and half the superior surface of the first segment yellow; two large ovate spots on the second segment, two smaller ones on the third, and two minute oblique ones on the fourth segment, yellow; the sixth segment with a tooth at its lateral basal margins; the seventh deeply emarginate above, the lower ventral plate terminating in an acute spine, which has a short tooth on each side at its base, and another longer tooth on the lateral margins.

This species is apparently unique in the Banksian Collection.

2. THYNNUS VARIABILIS. Plate III. fig. 1 ♂. B.M.

Myzine aptera, *Oliv. Encycl. Méth.* viii. 137. 7 ♀.
Thynnus variabilis, *Kirby, Trans. Linn. Soc.* xii. 476 ♂ ♀.
Guér. Voy. Coq. Zool. ii. 223; *Mag. Zool.* (1842) pl. 101. fig. 1–20.
Klug, Berl. Abhandl. (1842) 16. 4. f. 1 ♂, 2 ♀.
Thynnus apterus, *Guér. Voy. Coq. Zool.* ii. 230 ♀.
Thynnus flavo-guttatus, *Guér. Voy. Coq. Zool.* ii. 230 ♀.
Myrmecodes flavo-guttatus, *Latr. Nouv. Dict. d'Hist. Nat.* 2nd ed. xxii. p. 143 ♀.
Thynnus Olivieri, *Erichs. Wiegm. Arch.* (1842) p. 262. 235 ♂ ♀.
Westw. Arc. Ent. ii. 146.

Hab. Australia; Tasmania.

3. THYNNUS ZONATUS.

Thynnus zonatus, *Guér. Voy. Coq. Zool.* ii. 222.
Klug, Berl. Abhandl. (1842) 15. 2.

Hab. Australia.

4. THYNNUS AFFINIS. B.M.

Thynnus affinis, *Guér. Voy. Coq. Zool.* ii. 226 ♂.
Klug, Berl. Abhandl. (1842) 18. 7.

Hab. Australia (King George's Sound).

5. Thynnus confusus. B.M.

Male. Length 8½ lines.—Closely allied to *T. variabilis*, but apparently a very distinct species. Black: the orbits of the eyes, interrupted at their summit, the mandibles, clypeus, and scape of the antennæ in front, yellow. Thorax: the anterior and posterior margins of the prothorax, the tegulæ, a spot beneath the wings, an escutcheon-shaped spot on the scutellum and post-scutellum, yellow; the wings fulvo-hyaline; the legs fulvous, with the coxæ spotted with black and pale yellow. Abdomen cylindrical, truncated at the base; the first segment with a large transverse macula on each side, the following segments with a double row of ovate spots on each side; beneath, the basal segment pinched in the middle into a sharp central yellow carina, the second segment almost entirely yellow; the following segments with a large transverse macula on each side, each macula with a crescent-shaped black mark behind; the apical ventral plate terminating in a narrow style, which has a sharp spine at the apex.

Hab. Australia.

This species has a resemblance both to *T. variabilis* and *T. affinis*; the form of the abdomen, however, is like that of *T. Shuckardi*, being cylindrical and regularly tapering to its apex; but the narrow terminal style at once separates it from both the allied species.

6. Thynnus obscuripennis.

Thynnus obscuripennis, *Guér. Voy. Coq. Zool.* ii. 227 ♂.
Klug, Berl. Abhandl. (1842) 18. 8.

Hab. Australia.

7. Thynnus rufiventris. B.M.

Thynnus rufiventris, *Guér. Voy. Coq. Zool.* 227 ♂.
Klug, Berl. Abhandl. (1842) 19. 9.

Female. Length 7–9 lines.—Yellow above, the mandibles ferruginous; the thorax at the sides and beneath dark fusco-ferruginous, sometimes black; the prothorax above, the posterior margin of the mesothorax, the margins of the scutellum and the metathorax behind, blackish; the legs ferruginous, with the coxæ black. The abdomen dark rufo-piceous beneath; the margins of the segments above, and a central line on the third, fourth, and fifth, black or rufo-piceous; the second segment with a

transverse, slightly curved, delicate striation; the apical segment with a longitudinal striation.

Hab. Australia (Port Jackson).

8. Thynnus annulatus.

Thynnus annulatus, *Kirby, Trans. Linn. Soc.* xii. 476. 29 ♂.
Guér. Voy. Coq. Zool. ii. 228.
Klug, Berl. Abhandl. (1842) 17. 5.
Thynnus australis, *Boisd. Voy. de l'Astr. Zool.* 655. pl. 12. f. 2.
Guér. Voy. Coq. Zool. ii. 228.

Hab. Australia (Port Jackson).

9. Thynnus australis. B.M.

Myrmecodes Australis, *Gray, Cuv. Anim. Kingd.* (*Griff.*) (nec *Boisd.*) xv. 516. pl. 71. f. 3 ♀.
Thynnus Grayii, *Guér. Voy. Coq. Zool.* ii. 231.
Thynnus Australis, *Klug, Berl. Abhandl.* (1842) 18. 6.
Thynnus Brownii, *Westw. Arc. Ent.* ii. 113. pl. 76. f. 1 ♂.

Hab. Australia (King George's Sound).

10. Thynnus Wallisii. B.M.

Male. Length 12–13 lines.—The head, antennæ, thorax, femora, and base of the abdomen black; the mandibles, clypeus, the anterior margins of the face and lower orbits of the eyes yellow; tips of the mandibles rufo-piceous; the posterior margin of the prothorax and the tegulæ yellow; the tibiæ and tarsi reddish yellow or pale ferruginous. The head and thorax densely covered with griseous pubescence, that on the disk of the latter yellowish; the legs have a short thick griseous pubescence; the wings flavo-hyaline, the nervures fusco-ferruginous. Abdomen reddish yellow, each segment with a faint ferruginous transverse line, which is straight in the middle, then curves abruptly downwards, the line being widened at the lower part of the curve; the curved line then runs upwards as high as the transverse line, and from thence curves off to the outer margins; above the outer curve there is an indistinct ferruginous dot; the apical segment is punctured at the base, and has curved striæ at the apex; the lower ventral plate is triangular, the lateral angles subdentate, the apical one with a blunt spine.

Female. Length 10 lines.—Head ferruginous, with a transverse yellow stripe on the front, between the eyes; the thorax and coxæ black; femora, tibiæ, and tarsi ferruginous, the two latter densely spinose. Abdomen yellow above, black at the base and beneath; each segment with a similar curved line as in the

male, but much darker; the line takes a semicircular curve in the centre, then a downward, and again an upward curve to the lateral margin; the second segment transversely striated, the apical one longitudinally so.

Hab. Australia (Sydney).

11. Thynnus insignis. B.M.

Male. Length 15 lines.—Head and thorax black; abdomen reddish yellow; the legs ferruginous; the antennæ black, the scape ferruginous at the base and apex; the clypeus, labrum, mandibles, and orbits of the eyes yellow; the yellow line interrupted at the top of the eyes; the tip of the mandibles black. The thorax densely clothed with short silky white pubescence, that on the metathorax longest; the posterior margin of the prothorax and the tegulæ yellow; the wings slightly coloured. Abdomen truncate at the base, and gradually tapering from thence to the apex; the extreme base black; each segment with a round ferruginous spot on each side, united by an arched line of the same colour, which curves forwards to the basal margin of each segment; the apical margins of the segments semitransparent, and having a beautiful radiating series of dark hair-like lines springing from the basal margin of each segment; the apical segment with a semicircular space at its base striated longitudinally, beyond this the striation is transverse.

Hab. West Australia (Perth).

12. Thynnus simillimus. B.M.

Male. Length 15 lines.—This species is coloured like *T. Wallisii*, with the following differences: the tegulæ, prothorax, and legs entirely black, but pubescent as in *T. Wallisii*; the clypeus widely emargiate, the abdomen subtruncate at the base; the segments have a similar transverse upwards and downwards curved ferruginous line, but the segments are pale beneath the line; the apical segment has a semicircular margined space at its base, which is longitudinally striated; the segment has a curved striation beyond; the margin of the lower ventral plate is curved and entire.

Hab. Australia (Sydney).

13. Thynnus vestitus. B.M.

Male. Length 7½ lines.—Black: the head and thorax densely clothed with a white downy pubescence. The mandibles, clypeus, a line on the inner orbits of the eyes as high as the insertion of the antennæ, a narrow line behind them, and two oblique

spots between the antennæ, yellow. Thorax: wings hyaline, faintly yellow, with the nervures fusco-ferruginous; the tegulæ pale testaceous yellow; the anterior coxæ yellow in front. Abdomen: each segment has a broad interrupted yellow fascia, which is crossed longitudinally by a waved fuscous line at the lateral margins; beneath, the second and three following segments with a large yellow spot on each side; covered above and beneath with fine shallow punctures.

Hab. Australia (Swan River).

14. Thynnus flaviventris.

Thynnus flaviventris, *Guér. Voy. Coq. Zool.* ii. 229 ♂; *Mag. Zool.* (1842) pl. 101. f. 21 ♂.
Klug, Berl. Abhandl. 19. 10.

Hab. Australia.

15. Thynnus emarginatus.

Thynnus emarginatus, *Fabr. Syst. Ent.* 360. 2 ♀; *Ent. Syst.* ii. 244. 2; *Syst. Piez.* 231. 2.
Guér. Voy. Coq. Zool. ii. 229.

Hab. Australia.

16. Thynnus pedestris.

Tiphia pedestris, *Fabr. Syst. Ent.* 354. 8 ♀; *Ent. Syst.* ii. 228. 19; *Syst. Piez.* 235. 23.
Thynnus pedestris, *Guér. Voy. Coq. Zool.* ii. 16. 3.
Klug, Berl. Abhandl. (1842) 16. 3.
Mutilla Myrmecodes, *Lamarck, Hist. Nat.* 2nd ed. iv. 316. 7.

Hab. Australia.

17. Thynnus hyalinatus. B.M.

Thynnus hyalinatus, *Westw. Arc. Ent.* ii. 106. pl. 74. fig. 3 ♂, fig. 4 ♀.

Hab. Tasmania.

18. Thynnus maculosus. B.M.

Male. Length 11 lines.—Black: the clypeus, the margins of the face on each side, the lower part of the orbits of the eyes, and two spots between the antennæ, yellow; an ovate black spot in the middle of the clypeus; the head and thorax above with pale fulvous pubescence, on the sides and beneath it is cinereous. The metathorax with a transverse yellow spot at its base; the wings fulvo-hyaline, the nervures dark ferruginous; the legs ferruginous, with the coxæ black, the posterior pair with a

minute yellow spot at the sides. Abdomen: a subovate yellow spot on each side of the first five segments placed in the middle, a larger spot on each segment at the extreme lateral margins; beneath, a transverse spot on the basal segment, a large yellow macula on each side of the four following segments, and a minute one on the fifth.

Hab. Australia.

This species is closely allied to *T. variabilis* and *hyalinatus*.

19. Thynnus picipes.

Thynnus picipes, *Westw. Arc. Ent.* ii. 114. pl. 77. f. 2 ♂.
Thynnus flavilabris, *Guér. Mag. de Zool.* (1842) p. 8?

Hab. Australia (King George's Sound).

20. Thynnus Leachiellus. B.M.

Thynnus interruptus, *Westw. Arc. Ent.* ii. 115 (nec *Klug*), pl. 77. f. 1 ♂.
Thynnus Leachiellus, *Westw. Arc. Ent.* ii. 135. pl. 83. f. 4 ♀.

Hab. Australia.

21. Thynnus tuberculiventris. B.M.

Thynnus tuberculiventris, *Westw. Arc. Ent.* 118. pl. 76. f. 2 ♂.

Hab. Australia (King George's Sound).

22. Thynnus dimidiatus.

Thynnus dimidiatus, *Westw. Arc. Ent.* ii. 121. pl. 76. f. 5 ♂.

Hab. Australia.

23. Thynnus Shuckardi. B.M.

Thynnus Shuckardi, *Guér. Mag. Zool.* (1842) pl. 100. f. 13 ♂.
Westw. Arc. Ent. ii. 136. pl. 83. f. 5 ♀.

Hab. Australia.

24. Thynnus Guerinii. B.M.

Thynnus Guerinii, *Westw. Arc. Ent.* ii. 137.

Hab. Australia.

25. Thynnus Klugii. B.M.

Thynnus Klugii, *Westw. Arc. Ent.* ii. 140. pl. 82. f. 1 ♂.

Hab. Australia (Swan River).

26. Thynnus flavilabris. B.M.

Thynnus flavilabris, *Guér. Mag. Zool.* (1842) *Mon. Thynn.* p. 8.
Thynnus morio, *MacLeay, MS.?*

Hab. Australia.

27. Thynnus fenestratus. B.M.

Male. Length 12 lines.—Black: the abdomen shining, with a nigro-æneous tinge; the palpi, labrum, clypeus and mandibles orange-red, the tips of the latter black; the orange colour runs from the clypeus on each side along the anterior margin of the face to the base of the mandibles; the head and thorax with a dense griseous pubescence, which is obliterated on the disk of the latter, but thick and woolly on the metathorax; wings dark brown with a violet reflexion, their base hyaline. The abdomen with scattered punctures, and an impressed transverse line near the basal margin of the first, second, and third segments; the apical segment longitudinally rugose, the inferior ventral plate terminating in a barbed spine.

Hab. Australia (Swan River).

28. Thynnus gravidus.

Thynnus gravidus, *Westw. Arc. Ent.* ii. 141.
Thynnus Klugii, *Westw.* ♀?

Hab. Australia.

29. Thynnus purpureipennis.

Thynnus purpureipennis, *Westw. Arc. Ent.* ii. 143. pl. 83. f. 1 ♂.

Hab. Australia.

30. Thynnus decipiens.

Thynnus decipiens, *Westw. Arc. Ent.* ii. 105 (note). 124 ♂.

Hab. Tasmania.

31. Thynnus Olivieri.

Thynnus Olivieri, *Erichs. Wiegm. Arch.* (1842) p. 263. 235 ♂.
Westw. Arc. Ent. ii. 146.

Hab. Tasmania.

32. Thynnus fervidus.

Thynnus fervidus, *Erichs. Wiegm. Arch.* (1842) 262. 236 ♂.
Westw. Arc. Ent. ii. 146.

Hab. Tasmania.

33. Thynnus humilis.

Thynnus humilis, *Erichs. Wiegm. Arch.* (1842) 264. 238 ♀.
Westw. Arc. Ent. ii. 146.

Hab. Tasmania.

34. Thynnus modestus. B.M.

Male. Length 8 lines.—Shining black: closely and rather finely punctured; the mandibles, clypeus, orbits of the eyes interrupted at their summit, and a V-shaped mark between the antennæ, yellow. Thorax: the anterior and posterior margin of the prothorax reddish-yellow; the tibiæ, tarsi, and knees pale ferruginous; wings fulvo-hyaline, the nervures fusco-ferruginous. Abdomen: each segment with a large ovate honey-coloured macula on each side; beneath, the second and three following segments with a smaller subangular spot on each side.

Hab. Australia (Swan River).

35. Thynnus constrictus. B.M.

Male. Length 9½ lines.—Black and shining: the mandibles, clypeus, orbits of the eyes interrupted at their vertex, and a V-shaped mark between the antennæ, yellow. Thorax: a broad fascia on the posterior margin of the prothorax, the tegulæ, a square spot on the mesothorax touching the scutellum, the latter with a spot behind, the post-scutellum, and two oblique lines on the metathorax, yellow; wings fulvo-hyaline, the nervures fusco-ferruginous; the femora ferruginous, the tibiæ and tarsi yellow; the femora fuscous in front. Abdomen: the margins of the segments constricted; an oblong yellow macula at the lateral margins of each segment, each macula notched in front; at the apical margin of each segment are a number of large punctures; beneath coarsely punctured, and with a minute yellow spot on each side of the second, third, and fourth segments.

Hab. Western Australia (Swan River).

36. Thynnus senex. B.M.

Male. Length 9 lines.—Black: the head, thorax, and legs thickly covered with cinereous pubescence, slightly fulvous on the vertex and disk of the thorax; the mandibles, clypeus, and lower orbits of the eyes yellow; the clypeus with a transverse line above and two oblique lines beneath, ferruginous. Thorax: the hinder margin of the prothorax obscurely ferruginous; the wings hyaline, the nervures and tegulæ ferruginous; the legs ferruginous, with the coxæ and trochanters black. Abdomen:

each segment with a large ovate spot on each side, beneath spotted as above; the apical ventral plate angular at the apex, which terminates in a curved spine.

Hab. Western Australia.

37. Thynnus assimilis. B.M.

Male. Length 8–9 lines.—Closely allied to *T. melleus*; but the clypeus is not so much produced, and the process at the apex of the terminal ventral plate is truncate; in *T. melleus* it has an acute spine at the apex; the apical segment above is punctured in the latter insect, in the present it is longitudinally striated. The clypeus, mandibles, orbits of the eyes, hinder margin of the vertex, and two spots at the insertion of the antennæ, yellow; the yellow line round the orbits of the eyes interrupted at their summit. Thorax black; a line at the anterior and posterior margins of the prothorax, two longitudinal lines on the disk of the mesothorax, one over each tegula, two spots on the scutellum and one at each of its basal angles, the post-scutellum and an oblique spot on each side, two oblique lines on the metathorax and a small square one at its apex in the centre, yellow; the tegulæ and some irregularly-placed spots beneath the wings yellow; wings hyaline, the nervures ferruginous. Abdomen yellow, with a line down the centre, which is black at the base, becoming ferruginous towards the apex, and similar transverse lines at the basal and apical margins of all the segments; the legs ferruginous.

Var. 1. The abdomen ferruginous, with black lines as above.

Hab. Australia (Swan River).

38. Thynnus agilis. B.M.

Male. Length 11 lines.—Head and thorax black, abdomen reddish-yellow; the clypeus, a line at the inner and outer margins of the eyes interrupted at their summit, and two oblique spots between the antennæ and the mandibles, yellow. Thorax: the posterior margin of the prothorax, a spot on the scutellum, the post-scutellum, the tegulæ, and legs, yellow; the legs with a ferruginous tinge on the femora and tibiæ beneath; wings hyaline, with a faint yellow tinge, the nervures fusco-ferruginous; the metathorax swollen at the sides, rounded behind, and covered with hoary pubescence, the other parts of the thorax as well as the head with a short thin hoary pubescence. The base of the abdomen and the basal and apical margins of all the segments blackish-brown; each segment has on each side a large ovate macula nearly the width of the segment, and nearly meet-

ing in the centre; the apical segment with oblong punctures; the ventral plate terminating in an acute spine.

Hab. Australia (Swan River).

39. THYNNUS FLAVIPENNIS. B.M.

Male. Length 9 lines.—Black: a line along the outer orbits of the eyes which is continued along the margin of the vertex, the mandibles, clypeus, a broad line up the inner orbits of the eyes as high as the antennæ, and the scape in front, reddish-yellow. Thorax: the prothorax, a transverse spot on the mesothorax behind, a line over the tegulæ terminating in a spot, the scutellum, post-scutellum, and a reversed barb-shaped spot on the metathorax, yellow; there is also a yellow line at the sides of the latter, and the tegulæ are yellow; the wings flavo-hyaline, the nervures ferruginous; the legs pale ferruginous, with the anterior coxæ yellow in front. Abdomen reddish-yellow, each segment with a very large yellow spot on each side, the hinder margin of each defined by a ferruginous stripe; the apical segment with a curved striation; the ventral plate triangular, with the apical angle obtuse.

Hab. Australia.

Resembles *T. melleus*: some examples of this species have a large black or fuscous spot at the sides of the prothorax.

40. THYNNUS FLAVOPICTUS. B.M.

Male. Length 11 lines.—Black: the mandibles, clypeus, orbits of the eyes interrupted at their summit, the head behind, and two oblique lines between the antennæ, yellow. Thorax: the anterior and posterior margins of the prothorax, two oblique stripes on the disk of the mesothorax uniting at the base of the scutellum, the tegulæ and a line over them, a transverse spot on the scutellum, two ovate spots on each side, the post-scutellum uniting with a spot on each side, and the metathorax, yellow; the latter has a black angular spot in the middle of the base and a larger one at the lateral basal angles; the legs ferruginous, with the coxæ and femora yellow beneath; wings hyaline, their nervures fusco-ferruginous. Abdomen: each segment with a broad interrupted yellow fascia in the middle; the apical segment yellow, except at its base, and longitudinally striated; the ventral plate terminating in a sharp curved spine, which has a smaller one on each side at its base; beneath, the basal segment with a trilobate spot, the four following segments with a very

broad yellow fascia which is deeply emarginate in the centre, the sixth with a spot on each side.

Hab. Australia.

41. Thynnus (Thynnoides) gracilis. B.M.

Thynnus (Thynnoides) gracilis, *Westw. Arc. Ent.* ii. 139. pl. 83. f. 2 ♂, 3 ♀.

Hab. Australia (Adelaide; River Murray).

42. Thynnus (Thynnoides) nigripes. B.M.

Thynnoides nigripes, *Guér. Mag. Zool.* (1842) p. 10.

Hab. Australia (Swan River).

43. Thynnus (Thynnoides) fulvipes. B.M.

Thynnoides fulvipes, *Guér. Voy. Coq. Zool.* ii. 233.
Thynnus fulvipes, *Klug, Berl. Abhandl.* (1842) 22. 15 ♂.

Hab. Australia (Port Jackson).

44. Thynnus (Thynnoides) rubripes. B.M.

Thynnoides rubripes, *Guér. Voy. Coq. Zool.* ii. 233 ♂; *Atlas, Ins.* pl. 8. f. 9.
Thynnus rubripes, *Klug, Berl. Abhandl.* (1842) 22. 16.

Hab. Australia (Port Jackson).

45. Thynnus (Thynnoides) labiatus.

Thynnus labiatus, *Klug, Berl. Abhandl.* (1842) 23. 17 ♂.

Hab. Australia.

46. Thynnus (Thynnoides) pugionatus.

Thynnoides pugionatus, *Guér. Voy. Coq. Zool.* ii. 234 ♂.
Thynnus pugionatus, *Klug, Berl. Abhandl.* (1842) 23. 19.

Hab. Australia.

47. Thynnus (Thynnoides) fumipennis. B.M.

Thynnus (Thynnoides) fumipennis, *Westw. Arc. Ent.* ii. 108. pl. 75. f. 1 ♂, f. 2 ♀.

Hab. Australia (Port Philip).

48. Thynnus (Thynnoides) obscurus. B.M.

Thynnus obscurus, *Klug, Berl. Abhandl.* (1842) 22. 14. f. 4 ♂.
Thynnus (Thynnoides) obscurus, *Westw. Arc. Ent.* ii. 139. pl. 82. f. 2 ♀.

Hab. Australia.

49. Thynnus trochanterinus. B.M.

Thynnus trochanterinus, *Westw. Arc. Ent.* ii. 116. pl. 77. f. 3 ♂.

Hab. Australia (King George's Sound).

50. Thynnus (Thynnoides) basalis.

Male. Length 7½ lines.—Head, thorax, legs, and basal segment of the abdomen black, the rest of the segments of the latter red; the mandibles, clypeus, and orbits of the eyes yellow, the orbits black at their summit. The head and thorax covered with pale pubescence, and the legs with short pale downy pile; the anterior tibiæ in front and the apical joints of the tarsi ferruginous; the wings slightly coloured, with the nervures dark brown. Abdomen rather strongly punctured, the margins of the segments slightly constricted, and each with a transverse impressed line at its base; beneath regularly punctured, the margins of the segments fringed with pale hairs.

Hab. Australia (Swan River).

51. Thynnus (Thynnoides) carbonarius. B.M.

Male. Length 8 lines.—Black: head and thorax very closely punctured and subopake; abdomen as long as the head and thorax, punctured, closely so at the base of the segments, and much more distantly so towards their apical margins; the apical segment with a central produced subtriangular process at its base, longitudinally striated, beneath which it is transversely striated; beneath finely and very closely punctured; the sixth segment with a small tooth on each side of its apical margin; the seventh segment terminating in a lanceolate spine, which has a small tooth on each side of its base; the spine is transversely striated above at its base and flattened.

Hab. Australia (Adelaide).

52. Thynnus (Agriomyia) depressus. B.M.

Thynnus (Agriomyia) depressus, *Westw. Arc. Ent.* ii. 107. pl. 74. f. 5 ♂, f. 6 ♀.

Hab. Australia (King George's Sound).

53. Thynnus (Agriomyia) odyneroides. B.M.

Thynnus (Agriomyia) odyneroides, *Westw. Arc. Ent.* ii. 109. pl. 75. f. 3 ♂, f. 4 ♀.

Hab. Australia.

54. Thynnus (Agriomyia) melleus. B.M.

Thynnus (Agriomyia?) melleus, *Westw. Arc. Ent.* ii. 118. pl. 76. f. 4 ♂.

Hab. Australia (King George's Sound; Melbourne).

55. Thynnus (Agriomyia) trifidus. B.M.

Thynnus (Agriomyia) trifidus, *Westw. Arc. Ent.* ii. 119. pl. 77. f. 4 ♂.

Hab. Australia (King George's Sound).

56. Thynnus (Agriomyia) marginalis. B.M.

Thynnus (Agriomyia) marginalis, *Westw. Arc. Ent.* ii. 120. pl. 76. f. 3 ♂.

Hab. Australia (King George's Sound).

57. Thynnus (Agriomyia) marginilabris.

Agriomyia marginilabris, *Guér. Mag. Zool.* (1842) *Mon. Thynn.* p. 3. pl. 100 ♂.

Hab. Australia.

58. Thynnus (Agriomyia) consanguineus.

Agriomyia affinis, *Guér. Mag. Zool.* (1842) *Mon. Thynn.* p. 4.

Hab. Australia.

59. Thynnus (Agriomyia) Westwoodii.

Agriomyia Westwoodii, *Guér. Mag. Zool.* (1842) *Mon. Thynn.* p. 4.

Hab. Tasmania.

60. Thynnus (Agriomyia) maculatus. B.M.

Agriomyia maculata, *Guér. Voy. Coq. Zool.* ii. 218.
Thynnus maculatus, *Klug, Berl. Abhandl.* (1842) 20. 12.

Hab. Australia.

61. Thynnus (Agriomyia) variegatus.

Thynnus variegatus, *Klug, Berl. Abhandl.* (1842) 20. 12.

Hab. Australia.

62. Thynnus (Agriomyia) pulchellus. B.M.

Thynnus pulchellus, *Klug, Berl. Abhandl.* (1842) 20. 13 ♂.

Hab. Australia.

63. Thynnus (Agriomyia) senilis. B.M.

Thynnus senilis, *Erichs. Wiegm. Archiv* (1842) 263. 236 ♂.
Westw. Arc. Ent. ii. 146.

Hab. Tasmania.

64. Thynnus (Agriomyia) jucundus. B.M.

Male. Length 5 lines.—Black: the mandibles, clypeus, orbits of the eyes interrupted at their summit, a narrow line on the vertex, a spot between the stemmata, and an angular shape above the antennæ, bright yellow; the line on the inner orbits emarginate. The margins of the prothorax, an elongate-quadrate-shaped spot on the mesothorax having the anterior angles produced, the tegulæ and a line over them uniting with a spot behind, a spot on the scutellum, the post-scutellum, an elongate angular shape on the metathorax, its sides, and two spots beneath the wings, yellow; the legs red, and spotted with yellow; the wings hyaline and iridescent, with the nervures ferruginous. Abdomen: an interrupted broad yellow fascia on each segment, which is slightly notched anteriorly towards the lateral margins; beneath, the segments with broad interrupted fasciæ.

Hab. Australia.

65. Thynnus (Agriomyia) rubellus. B.M.

Male. Length $6\frac{1}{2}$ lines.—Black: the mandibles, anterior margins of the face, the clypeus, and the lower portion of the orbits of the eyes reddish-yellow. Thorax: a narrow line on the anterior margin of the prothorax, the tegulæ, and the post-scutellum yellow; the thorax beneath and the metathorax with cinereous pubescence; wings subhyaline, the nervures ferruginous; the legs ferruginous, with the coxæ black. Abdomen: the second, third, and fourth segments red, with a transverse whitish fascia near their apical margins; these fasciæ have a central minute black dot, and on each side a short black line; the fifth segment has at its apical margin a curved pale line on each side, terminating in a round dot within; beneath, the segments have a central and a lateral pale spot; the basal segment with a conical tubercle, which is pale at the tip.

Hab. Australia.

66. Thynnus (Agriomyia) inconstans. B.M.

Male. Length 8½ lines.—Black: head and thorax covered with cinereous downy pubescence, that on the vertex and disk of the thorax slightly fulvous; the clypeus and mandibles yellow, usually with ferruginous stains. Thorax: a minute yellow dot on the scutellum and post-scutellum; the legs ferruginous; the coxæ, trochanters, and femora above, fuscous or black; wings hyaline, the nervures black, becoming ferruginous at the base of the wings. Abdomen ferruginous, the basal and apical margins of the segments black or fuscous; a black, fuscous, or ferruginous line down the centre, forming, as it were, large ovate ferruginous spots on the segments on each side; some examples have the abdomen ferruginous, with large undefined spots on each side; sometimes the spots are yellowish, or the abdomen is dark fusco-ferruginous and the spots yellowish.

Hab. Australia.

67. Thynnus (Agriomyia) albo-pictus. B.M.

Male. Length 7 lines.—Black: the clypeus, mandibles, orbits of the eyes broadly, and a line tracing a bell-shaped form before the anterior stemma, white; the orbits of the eyes interrupted at their summit. The margins of the prothorax, a square spot on the mesothorax, the tegulæ, a broad stripe on the scutellum and a spot before its basal angles, the post-scutellum uniting with a spot beyond it, and the metathorax, except its extreme base, white; two large irregular-shaped spots beneath the wings; the coxæ and femora beneath white; the coxæ spotted with black; the anterior and intermediate tibiæ and tarsi ferruginous; wings hyaline, with blackish nervures. Abdomen: each segment with a very broad white fascia, the basal one narrowly interrupted, the following with a narrow central black line near their posterior margin and a minute notch anteriorly towards the lateral margins; beneath, white, with narrow black margins to the segments, the basal one produced into a conical tooth.

Hab. Australia (Swan River).

68. Thynnus (Agriomyia) luctuosus. B.M.

Male. Length 7–8 lines.—Jet-black: the abdomen shining; the head and thorax covered with confluent punctures and subopake; the sides and beneath with thin long cinereous pubescence; the anterior margin of the face and clypeus, a minute spot in the middle of the latter, a spot at the base of the mandibles, and a short narrow line on the lower part of the outer

orbits of the eyes, white; a minute white spot in the middle of the posterior margin of the vertex. Thorax: a narrow line on the anterior margin of the prothorax, a spot on the tegulæ, a triangular minute one on the mesothorax touching the scutellum, and the post-scutellum, white; wings subhyaline, faintly clouded towards their apex. Abdomen: an irregular-shaped white line in the middle of the second and two following segments, interrupted in the middle; the lines on the second segment emarginate beneath, those on the two following segments interrupted; the fifth segment with two minute dots; beneath, the basal segment produced into a white conical tooth in the middle of its apical margin, the three following segments with a transverse emarginate stripe in the middle and a minute dot at the extreme lateral margins; the fifth segment with two minute dots, or immaculate.

Hab. South Australia.

The white markings on the abdomen vary in different individuals in being more or less obliterated; and examples are not uncommon with the legs red, as observed by Mr. Bakewell, who captured several pairs of the sexes.

69. Thynnus (Agriomyia) albo-maculatus. B.M.

Male. Length $7\frac{1}{2}$ lines.—Black: head and thorax closely and strongly punctured and subopake; abdomen shining black. The clypeus and a line on each side, terminating at the margin of the eyes, and a spot at the base of the mandibles, yellow; the prothorax yellow, with a central and a lateral black dot; a square spot on the mesothorax, a spot on the scutellum and two on each side of it, the post-scutellum, an irregular stripe beneath the wings, the tegulæ, and two oblique spots on the metathorax, yellowish-white. Abdomen shining: the first segment with a minute white spot on each side; the second, third, and fourth segments with an oblong transverse subquadrate spot on each side; the fifth segment with a narrow line on each side; each segment has a transverse impressed line a little before its apical margin; beneath, the second and two following segments with transverse white spots on each side and an impressed line before their apical margins; the basal segment produced into a conical tooth in the middle of its posterior margin.

Hab. Australia (Adelaide).

Probably in some examples the markings on the thorax would be white; in the specimen described they appear discoloured.

70. Thynnus (Agriomyia) vigilans. B.M.

Male. Length 8 lines.—Black, and thinly covered with cinereous pubescence, which is most dense on the body beneath and on the metathorax; the mandibles, margins of the face on each side of the clypeus, a narrow line on the lower portion of the orbits of the eyes, and a narrow stripe on each side of the hinder margin of the vertex, yellow. Thorax: a minute yellow spot on the scutellum and post-scutellum; wings hyaline, the nervures fusco-ferruginous. Abdomen finely punctured; the margins of the segments slightly constricted; a subovate yellow spot on each side of the four basal segments.

Hab. Australia.

71. Thynnus cognatus. B.M.

Male. Length 6 lines.—Black: the head, thorax, and abdomen beneath covered with long griseous pubescence; the abdomen has a thin short cinereous pubescence above. Head and thorax covered with confluent punctures; the anterior margins of the face and clypeus and the mandibles yellow; the tarsi and articulations of the legs ferruginous, the tarsi slightly fuscous above; wings fulvo-hyaline, the nervures fusco-ferruginous. Abdomen subpetiolate, smooth, and shining; the four basal segments with an ovate orange spot on each side.

Hab. Australia.

This species is similarly coloured to *T. vigilans*, but differs in having the anterior margin of the clypeus yellow, the tarsi of a different colour, and in having the abdomen subpetiolate, shining, and not punctured.

72. Thynnus Xanthorrhœi (*MS. MacLeay*). B.M.

Male. Length 6 lines.—Black: the mandibles, labrum, inner and outer orbits of the eyes interrupted at their summit, a minute spot on the hinder margin of the vertex, and an elongate one between the antennæ which is divided by a narrow black line, yellow. Thorax: the margins of the prothorax, three large irregular-shaped spots beneath the wings, two pointed stripes on the mesothorax, an angular spot on the scutellum and a spot on each side, the post-scutellum with a spot on each side, and the metathorax, yellow; a central longitudinal black line and a large black spot on each side of the metathorax; the legs ferruginous, with the coxæ yellow; the trochanters black, and the apical joints of the tarsi fuscous; wings hyaline, the nervures fusco-ferruginous. Abdomen: all the segments, excepting the apical one, with a transverse yellow fascia in the middle more

or less interrupted, the fascia beneath produced laterally into a hook-shaped form and slightly notched above; beneath, the apical half of the basal segment yellow, with an oblique black line on each side; the second segment yellow, with a black stripe on each side, and two or three of the following segments with a yellow spot on each side.

Hab. Australia (Sydney, Moreton Bay, &c.).

73. THYNNUS CARINATUS. B.M.

Male. Length 5½–6 lines.—Black: the clypeus, anterior margins of the face, inner margins of the eyes broadly, not extending to their summit, a line behind the eyes, two spots on the hinder margin of the vertex, and a V-shaped mark between the antennæ, yellow; the clypeus with a central longitudinal black carina, not extending to the apex. The margins of the prothorax, an oblique stripe and two spots beneath the wings, the tegulæ, a minute spot on the mesothorax, with a similar one on the scutellum and another on each side of its base, the post-scutellum, and an oblique stripe on each side of the metathorax, yellowish-white; wings hyaline, the nervures ferruginous; legs ferruginous, with the intermediate and posterior tibiæ and tarsi fuscous above; the coxæ black, spotted with yellow. Abdomen shining; each segment, the two apical ones excepted, with a curved white or yellowish-white line on each side, which terminates at each end in a rounded spot; beneath, the second, third, and fourth segments with a similar curved line on each side, but not having terminal spots.

Hab. Australia (N.W. Coast).

74. THYNNUS OPTIMUS. B.M.

Male. Length 5¼ lines.—Head, thorax, and abdomen black above and ferruginous beneath; the mandibles, clypeus, orbits of the eyes, and a bell-shaped spot above the antennæ, yellow. Thorax: the margins of the prothorax (the anterior one interrupted), an oblong spot on the disk of the mesothorax, the tegulæ and a line over each, a spot on the scutellum, the post-scutellum, a longitudinal line on the metathorax, its sides, a spot on the coxæ, a transverse one on the breast, and several large ones beneath the wings, yellow; wings hyaline, the nervures ferruginous. Abdomen: a large yellow spot on each side of the segments, a line between the spots ferruginous; beneath, a yellow spot on each side of the second, third, and fourth segments.

Hab. Australia (Swan River).

75. Thynnus intricatus. B.M.

Male. Length 4½ lines.—Black: the head finely rugose; a narrow line at the lower orbits of the eyes, the clypeus and anterior margins of the face, two spots between the antennæ, and a spot at the base of the mandibles, white; an oblique reddish-yellow spot on each side of the vertex touching the eyes; an anchor-shaped black spot on the clypeus. Thorax finely punctured; the metathorax finely rugose, except its extreme base, which is smooth and shining; a line on the anterior and posterior margins of the prothorax, the former slightly interrupted, a spot on the tegulæ, a longitudinal stripe on the mesothorax, a spot on the scutellum, a spot on the posterior lateral margin of the metathorax, and three spots on each side of the thorax beneath the wings, white; the wings hyaline, their nervures black. Abdomen smooth and shining; the basal segment with a minute white spot on each side, the four following segments with a large oblique spot at their lateral margins and two small ones in the centre, these spots united to each other on each side by a narrow curved line; beneath, the second, third, and fourth segments with an ovate white spot at their extreme lateral margins; the terminal segment produced into an obtuse appendage which has a minute tooth in the middle of its apical margin.

Hab. Tasmania.

76. Thynnus niger. B.M.

Male. Length 7–8 lines.—Black: the head and thorax very closely punctured, and with silvery pubescence on the cheeks, coxæ, femora, pectus, and metathorax; the clypeus and mandibles yellow; the tips of the mandibles, margins of the clypeus, and two oblique spots on the latter, black; the wings hyaline with a yellowish tinge, the nervures and outer margins of the tegulæ obscurely ferruginous; the spines and claws of the tarsi ferruginous. Abdomen shining and finely punctured; a deeply impressed longitudinal channel in the middle of the basal segment; the margins of the segments constricted; the apical segment terminating in an acute spine which has a minute lateral spine at its base.

Hab. Tasmania.

77. Thynnus (Agriomyia) nitidus. B.M.

Male. Length 4½ lines.—Black, shining, and punctured; the head and thorax with a thin cinereous pubescence; tips of the mandibles ferruginous; the wings subhyaline, and slightly fuscous towards their apex, the nervures black; the tarsi obscurely ferruginous, with the spines ferruginous. Abdomen covered with fine shallow punctures, the margins slightly punc-

tured; beneath, smooth and shining; the apex terminating in a lanceolate appendage.

Hab. Australia.

78. Thynnus (Agriomyia) umbripennis. B.M.

Male. Length 5 lines.—Black and closely punctured; the head and thorax subopake; the abdomen shining; wings dark brown, with a violet iridescence. Abdomen: the segments with their margins deeply constricted; beneath roughly punctured, the punctures confluent; the sixth ventral segment with a stout angular tooth on each side; the apical segment with deep coarse punctures, and terminating in a tridentate process.

Hab. Australia.

79. Thynnus (Agriomyia) fervens. B.M.

Male. Length 5½ lines.—Black: head and thorax very closely punctured and subopake; the abdomen with distant very shallow punctures, and shining black; the mandibles, tibiæ, tarsi, and knees ferruginous; the apical joints of the tarsi dusky; wings fulvo-hyaline, the nervures ferruginous; the head and thorax with a thin pubescence, which is pale fulvous on the disk and cinereous on the sides and beneath. Abdomen: the margins of the segments constricted; the apical ventral segment terminating in an angulated appendage which has a minute tooth at its apex.

Hab. Australia.

80. Thynnus (Agriomyia) tenuatus. B.M.

Male. Length 7 lines.—Black, subopake, very closely punctured, and thinly covered with hoary pubescence; the mandibles shining black; the tarsi obscurely ferruginous beneath, the spines of the tarsi and the calcaria ferruginous; the wings hyaline, the nervures black; the abdomen longer than the head and thorax; the basal margin of the segments of the abdomen depressed; the apical segment with a triangular shape in the middle of its base, beneath which it is concavely truncate, and then is oblique to the apical margin, the triangular shape and the oblique portion longitudinally grooved; the basal segment not spined beneath or toothed, the segments slightly concave, the apical one obtuse.

Hab. Australia (Swan River).

This species has very much the aspect of a *Rhagigaster*, but, as the description shows, it is a true *Thynnus*.

81. Thynnus (Agriomyia) sexmaculatus. B.M.

Male. Length 5½ lines.—Black: head and thorax closely punctured and subopake; abdomen very smooth and shining; legs ferruginous, with the coxæ and trochanters black, and the tarsi fuscous or fusco-ferruginous; the head, thorax, and legs thinly covered with hoary pubescence. The anterior margin of the clypeus and face, the mandibles, a narrow interrupted line on the anterior margin of the prothorax, and an ovate macula on each side of the second, third, and fourth segments of the abdomen, white; beneath, smooth, shining, and impunctate; the terminal segment of a broad lanceolate form, with a minute tooth at its apex.

Hab. Australia (Sydney).

82. Thynnus (Agriomyia) bidentatus. B.M.

Male. Length 4½ lines.—Black and shining: head closely punctured and thinly covered with cinereous pubescence; the clypeus, an ovate spot above each antenna, the mandibles, and an abbreviated line behind the eyes, yellow; a black line extending halfway down the clypeus; the anterior margin of the clypeus and the tips of the mandibles ferruginous. Thorax: a broad stripe on the anterior and posterior margins of the prothorax, a spot on the tegulæ, a quadrate spot on the mesothorax, an ovate one on the scutellum, the post-scutellum, an oblong spot at the sides of the metathorax, a large spot beneath the wings with a smaller one behind it, yellow; the tibiæ and tarsi ferruginous; a yellow spot at the apex of the anterior and intermediate femora outside; the intermediate and posterior tarsi dusky; the wings hyaline, the nervures ferruginous. Abdomen: the posterior margin of the segments broadly and deeply depressed, each segment with a large subovate macula on each side; beneath roughly punctured, the second and three following segments with a large yellow macula on each side, the fifth segment armed on each side with a long stout acute tooth which curves backwards; the apical segment lanceolate.

Hab. Australia (Swan River).

83. Thynnus (Agriomyia) combustus. B.M.

Male. Length 4 lines.—Black, with the abdomen red: the clypeus very much produced, ferruginous anteriorly and truncate, the margins on each side of the truncation and a stripe on the mandibles yellowish-white; two minute white spots between the antennæ. The anterior margin of the prothorax with a

narrow line on each side, a spot on the tegulæ, a minute one on the scutellum, and the post-scutellum, yellow; wings subhyaline, nervures fuscous. The base of the abdomen black, the margins of the segments deeply constricted; an oblong yellow spot on each side of the second and third segments; beneath, the apical ventral segment rounded at its apical margin and with a minute tooth in the middle.

Hab. Australia.

84. Thynnus (Agriomyia) cryptoides. B.M.

Male. Length 4 lines.—Head and thorax black, the legs and abdomen ferruginous; the five or six apical joints of the antennæ arcuate; the orbits of the eyes interrupted at their vertex, the clypeus, margins of the face on each side of the clypeus, and the mandibles, yellow; the base of the clypeus black. Thorax bright shining black; the mesothorax punctured; the metathorax delicately transversely aciculate; the margins of the prothorax slightly interrupted in the middle, a spot on the mesothorax, an angular spot on the scutellum, a lunate one on the post-scutellum, yellow; the coxæ black, with their apex and the outside of the intermediate and posterior pairs ferruginous; the wings hyaline, the nervures ferruginous. Abdomen: the base black and subpetiolate; the apical ventral segment lanceolate, with a minute curved black spine at the apex.

Female. Length $2\frac{1}{2}$ lines.—Ferruginous: the thorax and the third, fourth, and fifth segments of the abdomen more or less fuscous; the head and the tibiæ and tarsi pale; the head smooth, the thorax punctured; the second segment of the abdomen with four deep transverse grooves, the following segments with scattered shallow punctures.

Hab. Australia (River Plenty).

85. Thynnus (Agriomyia) volatilis. B.M.

Male. Length $4\frac{1}{4}$ lines.—Black, with the abdomen and legs ferruginous. The anterior margins of the face and clypeus, the mandibles, a spot above the insertion of each antenna, and a very narrow line at the inner orbit of the eyes, yellow; an obscure ferruginous line on the posterior margin of the vertex, more or less interrupted. The anterior and posterior margins of the prothorax very narrowly testaceous; wings hyaline, their nervures fusco-ferruginous; the coxæ, trochanters, and base of the abdomen black.

Hab. Australia.

86. Thynnus (Agriomyia) Tryphonoides. B.M.

Male. Length 4 lines.—Head and thorax black; abdomen and legs ferruginous. The clypeus much produced, its apex as well as the mandibles yellow, the latter ferruginous at their tips; antennæ shorter than the thorax, the joints subarcuate. The prothorax above, the tegulæ, and post-scutellum yellow; the wings subhyaline and iridescent, the nervures fuscous, becoming pale ferruginous towards their base; the coxæ, trochanters, and base of the femora black. Abdomen widened towards its apex, its extreme base and two transverse spots beneath, black; the extreme base of the fourth and fifth segments above, fuscous; the head and thorax with a thin pale fulvous pubescence.

Hab. Australia (Adelaide).

87. Thynnus (Agriomyia) Cerceroides. B.M.

Male. Length $4\frac{1}{2}$ lines.—Black, much variegated with yellow: the head and thorax strongly punctured; the clypeus, mandibles, a spot above the insertion of each antenna, a line on the inner and outer orbits of the eyes, yellow. Thorax: a line on the anterior and posterior margins of the prothorax (the former interrupted), a large irregular-shaped spot beneath the wings, with a smaller one behind it, a large curved macula at the sides of the metathorax, a lunate spot on the scutellum and the post-scutellum, yellow; the legs yellow, with black and ferruginous stains; the wings hyaline, the nervures testaceous. Abdomen: the segments deeply constricted, the five basal segments with oblong maculæ on each side, the maculæ emarginate in front; beneath, the second, third, fourth, and fifth segments with an oblong macula at their lateral margins, and the apical segment with a short stout tooth on each side.

Hab. Australia.

88. Thynnus (Agriomyia) tristis. B.M.

Male. Length 5 lines.—Black: clothed with cinereous pubescence, rather densely so on the face and sides of the thorax; that on the abdomen thin and downy; the head and thorax closely punctured, the base of the metathorax shining and delicately striated; wings hyaline and iridescent, the nervures black; the tibiæ with pale testaceous spines at their apex.

Hab. Australia.

89. Thynnus (Agriomyia) ruficornis. B.M.

Male. Length 5 lines.—Black: the head and thorax closely punctured, the base of the metathorax shining and impunctate;

abdomen shining, and having a number of scattered shallow punctures, covered with a thinly scattered griseous pubescence; wings hyaline and iridescent, the nervures and tegulæ rufo-testaceous. The antennæ, anterior margin of the clypeus, the mandibles and legs, ferruginous.

Hab. Australia (Swan River).

90. Thynnus (Agriomyia) sedulus. B.M.

Male. Length 3½ lines.—Black, with the legs, the apex of the first, the second, third, and fourth segments of the abdomen ferruginous; a few scattered hairs on the head and thorax, the abdomen having a thin clothing of longer hair at its apex. The clypeus rufo-testaceous, with its margins, the inner orbit of the eyes, the mandibles, and an interrupted line behind the eyes, yellow; an interrupted line on the prothorax in front and a spot beneath the wings yellow; the coxæ and trochanters black; the wings hyaline and iridescent, their nervures, and also the tegulæ, rufo-testaceous.

Hab. Australia.

91. Thynnus (Agriomyia) fallax. B.M.

Male. Length 5 lines.—Black: head and thorax very closely punctured; abdomen smooth, shining, and with a few widely scattered delicate punctures. The clypeus with a small shining tubercle in the middle, its anterior margin truncate; the mandibles and antennæ ferruginous, four or five of the apical joints of the latter fuscous, and the tips of the former blackish; the wings flavo-hyaline, the nervures ferruginous, becoming testaceous towards the base of the wings, the tegulæ rufo-testaceous; the legs ferruginous, with the coxæ, trochanters, and base of the femora black; the apex of the abdomen with a little fulvous pubescence.

Hab. Australia (Adelaide).

92. Thynnus (Agriomyia) minutus. B.M.

Male. Length 2½ lines.—Black: the head and thorax variegated with yellow, the abdomen reddish in the middle. The clypeus, mandibles, and two abbreviated lines between the antennæ yellow. The anterior and posterior margins of the prothorax, the tegulæ, extreme base of the wings, a bell-shaped spot on the scutellum, a line at the sides of the metathorax, and a spot beneath the wings, yellow; the latter hyaline and iridescent, with the nervures rufo-testaceous; the legs rufo-testaceous; the coxæ black, spotted with yellow. Abdomen rufo-testaceous.

with the base and apical portion more or less fuscous, the extreme apex pale, the apical margins of the second, third, and fourth segments fuscous; a yellowish-white spot at the extreme lateral margin of each segment.

Hab. Australia.

93. Thynnus (Agriomyia) mœstus.

Male. Length 6½ lines.—Black: the head and thorax closely punctured, the legs red, the abdomen with a number of glaucous spots. The anterior margin of the clypeus yellowish-white; the mandibles ferruginous, their apex bidentate. Thorax: the prothorax with a narrow pale testaceous margin in front, the postscutellum pale testaceous; wings fusco-hyaline, their nervures dark ferruginous. Abdomen shining, and having a number of transverse punctures, the apical portion of each segment smooth and impunctate; the second, third, fourth, and fifth segments with two central and one lateral irregularly-shaped glaucous spots; beneath, the second and two following segments with a central transverse spot.

Female. Length 4 lines.—Black: head and legs ferruginous; thorax punctured; the basal segment of the abdomen punctured, the second with four deep transverse grooves.

Hab. Australia (Port Philip). (Coll. W. W. Saunders, Esq.)

94. Thynnus (Agriomyia) petiolatus.

Male. Length 4¾ lines.—Black: the head and thorax covered with strong confluent punctures; antennæ orange-red; wings hyaline, with their apical margins faintly clouded, the nervures dark fuscous; the intermediate and posterior tibiæ serrated exteriorly. Abdomen ovate, smooth and shining, the basal segment forming a short petiole at its base.

Hab. Australia (Hunter River). (Coll. W. W. Saunders, Esq.)

95. Thynnus (Agriomyia) lucidus.

Male. Length 4½ lines.—Jet-black and shining: the mandibles and legs pale ferruginous; the clypeus elevated, carinate in the middle and bidentate at the apex. The head and thorax with shallow punctures; the metathorax smooth and shining, its truncation rugose; the wings hyaline and iridescent, the nervures ferruginous. Abdomen smooth and shining, very delicately punctured, the margins of the segments slightly depressed.

Hab. Tasmania. (Coll. W. W. Saunders, Esq.)

96. Thynnus (Agriomyia) maurus.

Male. Length 10 lines.—Black: head and thorax finely punctured, the punctures distant on the vertex, disk of the mesothorax, and on the scutellum; the clypeus convex, its anterior margin truncate; the cheeks, thorax on the sides and beneath covered with cinereous pubescence; the legs have also a cinereous pubescence; the wings dark brown, with a bright purple iridescence; the apex of the anterior wings pale. Abdomen smooth and shining, and having a few distant minute punctures; the margins of the segments depressed, and with a transverse impressed line at the base of each segment; the apical segment above rounded, the ventral plate somewhat triangular, with a minute tooth at the apex; the sixth ventral segment with a tooth at each posterior lateral angle.

Hab. Australia. (Coll. W. W. Saunders, Esq.)

97. Thynnus (Agriomyia) Crabroniformis.

Male. Length 4 lines.—Black, with yellow bands on the abdomen; the mandibles and clypeus yellow; the antennæ ferruginous beneath. Thorax: two oblique lines on the prothorax, a spot on the tegulæ, a minute one on the scutellum and the post-scutellum, yellow; wings hyaline, with the nervures rufo-testaceous; the tibiæ, tarsi, and tips of the femora rufo-testaceous, the posterior tarsi yellow, the apical joint ferruginous. Abdomen: the second, fifth, sixth, and seventh segments yellow.

Hab. Australia. (Coll. W. W. Saunders, Esq.)

98. Thynnus (Agriomyia) anilitatis.

Male. Length 6½ lines.—Black: head and thorax covered with long pubescence, that on the head above and on the disk of the thorax slightly fulvous; on the cheeks, thorax beneath, and on the metathorax and legs it is cinereous; the clypeus with a central longitudinal carina; the mandibles yellow. The wings hyaline or faintly yellowish, the nervures brown, the stigma black; the tibiæ with their calcaria white, the claws of the tarsi ferruginous. Abdomen subpetiolate, the margins of the segments depressed, sparingly pubescent above, more thickly so beneath.

Female. Length 4½ lines.—Black: the head smooth, shining, and delicately and distantly punctured. Thorax finely rugose, metathorax obliquely truncate; the articulations of the legs and the spines of the tarsi ferruginous. Abdomen: the basal segment rugose, with a transverse carina near its apex; the second segment with a transverse carina at the base and apex, with the intervening space coarsely rugose; the following segment rugose,

with a smooth shining space at the base; the rugose portion of the segments covered with cinereous pubescence.

Hab. Australia.

99. Thynnus (Agriomyia) iridipennis.

Male. Length 3½ lines.—Black, shining, and punctured: the anterior margin of the clypeus and of the face, and a spot at the base of the mandibles, white; a minute spot above each antenna and a minute obscure one at the summit of the eyes yellow; the head with long thin cinereous pubescence. Thorax: an obscure line on each side of the anterior margin of the prothorax, the posterior margin, the tegulæ, a spot on the scutellum, and the post-scutellum, obscure yellow; the calcaria and spines of the tarsi white; the wings hyaline and splendidly iridescent, the nervures testaceous. Abdomen: the margins of the segments constricted; beneath, the apical segment truncate, the angles of the truncation with minute teeth, and with a longer acute one in the middle.

Female. Length 1¾ line.—Obscure rufo-testaceous: head smooth and shining; thorax sparingly punctured; the legs, basal and apical segments of the abdomen pale rufo-testaceous; the second segment with two transverse carinæ.

Hab. Australia (Lower Plenty). (Coll. R. Bakewell, Esq.)

100. Thynnus (Agriomyia) truncatus.

Male. Length 4–4½ lines.—Black, slightly shining, and thinly clothed with cinereous pubescence: the clypeus truncate anteriorly, the margin on each side of the truncation, a spot at the base of the mandibles, a narrow line on each side of the anterior margin of the prothorax, and the post-scutellum, or a line upon it, yellowish-white; the wings hyaline, the nervures black. The margins of the segments of the abdomen deeply constricted; beneath, the apical margins narrowly testaceous, the terminal segment truncate, or slightly emarginate its entire width at its apical margin; in the middle of the emargination an acute spine.

Hab. Australia (Lower Plenty, Victoria). (Coll. R. Bakewell, Esq.)

101. Thynnus (Agriomyia) trivialis.

Male. Length 4 lines.—Black: head and thorax closely punctured and opake, the metathorax and abdomen smooth and shining, the former very delicately reticulated. The anterior margin of the clypeus and of the face, as well as the mandibles, yellow; the legs ferruginous, the coxæ and trochanters black, the claw-joint of the tarsi fuscous; the anterior and posterior

margins of the prothorax, an ovate spot on the scutellum, and the post-scutellum, yellow; the fasciæ on the prothorax slightly interrupted; wings hyaline, faintly yellowish. Abdomen: a pale yellow ovate spot on each side of the second, third, and fourth segments.

Female. Length 3 lines.—Brown-black: the head smooth and shining, with a few scattered punctures; the thorax and abdomen finely rugose, the basal margins of the segments of the abdomen finely striated; the second segment with four deep transverse grooves; the apical margins of the segments narrowly, and the apical segment entirely, rufo-testaceous; the face anteriorly, the antennæ, mandibles, and legs rufo-testaceous.

Hab. Australia (Lower Plenty). (Coll. R. Bakewell, Esq.)

102. Thynnus (Agriomyia) Ichneumoniformis.

Male. Length 4½ lines.—Head, thorax, and extreme base of the abdomen black; legs and abdomen ferruginous; the coxæ black, the trochanters more or less black; the anterior margin of the face and clypeus, uniting with a triangular spot on the latter, and the mandibles, yellow; sometimes the margins of the face and clypeus are black; two oblique yellow spots between the antennæ, an interrupted line on the collar, and a curved line before the tegulæ, yellow. The wings hyaline, the nervures brown; the apical segments of the abdomen sometimes with blackish stains, the apex rounded; beneath, the apical segment is narrowed and ciliated.

Hab. Australia (Lower Plenty). (Coll. R. Bakewell, Esq.)

103. Thynnus (Agriomyia) brevicornis.

Male. Length 3½–5 lines.—Black, slightly shining, and punctured: the antennæ shorter than the head and thorax; thinly clothed with cinereous pubescence; the thorax rather strongly punctured above, the metathorax rugose, with the base very delicately rugose; the wings hyaline and iridescent, the nervures testaceous. Abdomen: the margins of the segments depressed, each segment with a raised curved shape on each side, which is impunctate or slightly punctured; beneath, strongly punctured, the terminal segment rounded at its apex, which is ciliated, with short rigid hairs.

Hab. Australia (Lower Plenty). (Coll. R. Bakewell, Esq.)

104. Thynnus (Agriomyia) monilicornis.

Male. Length 4–4½ lines.—Black, slightly shining: head and thorax closely punctured, thinly covered with cinereous glittering

pubescence; the joints of the antennæ arcuate, or rather, much produced at their base beneath. Thorax: the wings hyaline, faintly tinted towards their apex, the nervures black. Abdomen much narrowed at the base, subpetiolate, the basal segment with a central impressed line; the apical appendage narrowed at the base, and with an angular tooth in the middle of its apical margin.

Female. Length 2 lines.—Head, thorax, legs, and base of the abdomen rufo-testaceous; head and thorax sparingly punctured, the truncation of the metathorax smooth and shining; the second segment of the abdomen transversely rugose; the third, fourth, and fifth segments fusco-ferruginous, and thinly sprinkled with short cinereous hairs; the apex pale testaceous.

Hab. Australia (Lower Plenty). (Coll. R. Bakewell, Esq.)

105. Thynnus (Agriomyia) calcaratus.

Male. Length 4 lines.—Black: head and thorax closely punctured and subopake, the base of the metathorax and the abdomen smooth and shining; the mandibles and anterior margin of the clypeus and face pale yellow; the head, thorax beneath and on the sides with long cinereous pubescence; the wings hyaline, with a brilliant iridescence; the tibiæ, tarsi, and tips of the femora ferruginous; the posterior femora with a blunt tooth in the middle beneath.

Hab. Australia (Lower Plenty). (Coll. R. Bakewell, Esq.)

106. Thynnus (Lophocheilus) villosus.

Lophocheilus villosus, *Guér. Mag. Zool.* (1842); *Mon. Thynn.* 12. pl. 103.

Hab. Australia.

107. Thynnus (Lophocheilus) distinctus.

Lophocheilus distinctus, *Guér. Mag. Zool.* (1842); *Mon. Thynn.* 12. pl. 103.

Hab. Australia.

108. Thynnus (Lophocheilus) collaris.

Lophocheilus collaris, *Guér. Mag. Zool.* (1842); *Mon. Thynn.* 13.

Hab. Australia.

109. Thynnus (Enteles) bicolor.

Thynnus (Enteles) bicolor, *Westw. Arc. Ent.* ii. 144. pl. 82. f. 4 ♀.

Hab. Australia (King George's Sound).

110. Thynnus (Catocheilus) diversus.

Catocheilus Klugii, *Guér. Mag. Zool.* (1842); *Mon. Thynn.* 8, 9 ♂ ♀.

Hab. Australia (Swan River).

111. Thynnus (Eirone) dispar.

Eirone dispar, *Westw. Arc. Ent.* ii. 144. 82. f. 5 ♂, f. 6 ♀.

Hab. Australia (Adelaide).

112. Thynnus (Eirone) tuberculatus.

Male. Length 3⅓ lines.—Black: the head and thorax strongly and closely punctured, thinly covered with short white downy pubescence; the clypeus with a lanceolate white mark in the centre, which has a minute tubercle on each side about the middle; the mandibles ferruginous, with a white line at their base. The prothorax with a slightly interrupted white line on the anterior margin, and a widely interrupted one posteriorly; the wings splendidly iridescent and hyaline, the nervures testaceous; the tibiæ and tarsi rufo-testaceous. Abdomen lanceolate, the apical segment rugose, pointed at the apex.

Female. Length 2½ lines.—Pale ferruginous: the legs pale rufo-testaceous; the head oblong-quadrate; the thorax of the same form as in *T. vitripennis*; the metathorax delicately aciculate and with a few elongate punctures. Abdomen elongate, each segment with a curved dark ferruginous line on each side; thinly covered with strong elongate punctures; the apex acute.

Hab. S. Australia (Lower Plenty). (Coll. R. Bakewell, Esq.)

113. Thynnus (Eirone) vitripennis.

Male. Length 3¼ lines.—Black, shining: the head and thorax with shallow punctures; slightly pubescent at the sides of the head, on the thorax beneath and on the sides, and on the posterior portion of the metathorax; the legs have also a slight griseous pubescence. The clypeus with a sharp carina in the middle and a triangular white spot in front; a narrow white line runs from the clypeus to the margin of the eyes; a line at the base of the mandibles, and two small oblique ones between the antennæ, white; the mandibles obscurely ferruginous. Thorax: a narrow white line on the anterior margin of the prothorax; wings hyaline, faintly tinted with yellow, and splendidly iridescent; the legs rufo-testaceous, with the tarsi palest. Ab-

domen lanceolate; the apical segment rounded, punctured at the base, and glassy smooth at the apex.

Female. Length 2½ lines.—Pale ferruginous: the head oblong-quadrate; the thorax narrower than the head, the sides of the prothorax slightly rounded, the mesothorax narrow and quadrate above; the metathorax widened to its apex, which is rounded. Abdomen elongate, as long as the head and thorax, and entirely smooth and shining; the apex acute.

Hab. S. Australia (Lower Plenty). (Coll. R. Bakewell, Esq.)

114. Thynnus attenuatus. B.M.

Female. Length 4½ lines.—Head black, compressed, smooth, subopake, rounded behind, anteriorly truncate; the face, mandibles, antennæ, legs, and thorax anteriorly, rufo-testaceous; the thorax compressed, very narrow anteriorly; the metathorax narrowed at the base; abdomen obscure rufo-testaceous, with a tuft of pale pubescence at the base; the second segment transversely striated.

Hab. Australia.

115. Thynnus fimbriatus. B.M.

Female. Length 4 lines.—Head and abdomen black; thorax and legs ferruginous, the prothorax prolonged into a neck; thorax strongly punctured; the first and second segments of the abdomen transversely striated, the three following punctured at their apical margins, the apical one longitudinally striated; the base fringed with long silvery-white hair.

Hab. Australia.

116. Thynnus quadratus. B.M.

Female. Length 3 lines.—Head and thorax anteriorly ferruginous; thorax posteriorly, legs, and abdomen obscure fusco-ferruginous; thorax oblong-quadrate, constricted between the meso- and metathorax, the latter vertically truncate, the upper margin of the truncation rounded; the second segment of the abdomen transversely furrowed in the middle.

Hab. Australia.

117. Thynnus sulcatus. B.M.

Female. Length 4 lines.—Head, thorax, and legs pale rufo-testaceous; abdomen fusco-ferruginous, palest towards the apex; the front very prominent, with a broad deep sulcation on each side; the metathorax oblique, smooth and shining.

Hab. Australia.

118. THYNNUS COMPRESSUS. B.M.

Female. Length 5 lines.—Head bright castaneous, flattened, smooth and shining; thorax beneath, the legs, and second segment of the abdomen rufo-testaceous; the disk of the thorax obscure fusco-ferruginous; the anterior margin transverse, with the lateral angles acute; the metathorax oblique, with a few delicate punctures, the pro- and mesothorax with scattered punctures.

Hab. Australia.

119. THYNNUS SULCIFRONS. B.M.

Female. Length 5 lines.—Head ferruginous, flattened, widened and rounded behind the eyes, with a longitudinal excavation on each side; the mandibles simple, falcate, and acute at the apex, the apex black; thorax black, smooth and shining; the metathorax narrowed at the base, truncate behind. Abdomen variegated with yellow bands; the basal segment with an uninterrupted fascia, a spot on each side of the second, the third and fourth with an interrupted fascia.

Hab. Australia.

120. THYNNUS MOLITOR. B.M.

Female. Length 10 lines.—Black, shining: front coarsely punctured; prothorax transverse in front and narrowed behind; metathorax obliquely truncate; base of the abdomen closely punctured, the second segment transversely striated, the apical one longitudinally so.

Hab. S. Australia.

(Probably the ♀ of *T. Klugii.*)

121. THYNNUS DILATATUS. B.M.

Female. Length 6½ lines.—Black, slightly shining: head small; anterior margin of the thorax slightly incurved; metathorax abruptly truncate; intermediate tibiæ very broadly dilated; the two basal segments of the abdomen transversely striated, the four following smooth and shining.

Hab. Australia.

122. THYNNUS ADUSTUS. B.M.

Female. Length 6 lines.—Dark reddish-brown above, beneath ferruginous; closely punctured, the punctures confluent on the head and thorax; the metathorax oblique; the legs, antennæ, and front of the head ferruginous.

Hab. Australia.

123. Thynnus crassipes. B.M.

Female. Length 5 lines.—Black: head shining, with large deep punctures; thorax smooth and shining in front, the anterior margin incurved to the form of the head; metathorax punctured, obliquely truncate, and covered, as well as the base of the abdomen and the legs, with glittering white pubescence; the femora and tibiæ incrassate; the two basal segments of the abdomen with deep transverse furrows; the apical segment compressed, forming above a flattened oblong surface, narrowest at the base, which is grooved in curves transversely; the apex with a semicircular thin membrane.

Hab. Australia.

124. Thynnus læviceps. B.M.

Female. Length 4 lines.—Dark red-brown: the head and thorax in front smooth and shining; the metathorax oblique and strongly punctured, sprinkled with silvery hair, as are also the legs and base of the abdomen; the truncated portion of the abdomen punctured, above smooth and shining; the second segment transversely striated; the apical segment longitudinally striated.

Hab. Australia.

125. Thynnus serripes. B.M.

Female. Length 4 lines.—Black: the legs ferruginous, the coxæ black, the intermediate and posterior tibiæ serrated externally and covered with rigid setæ, the posterior tarsi fuscous; the head and thorax with distant punctures; the metathorax truncate, its upper surface semicircular; the abdomen with scattered punctures; the second segment irregularly transversely striated, the apical segment longitudinally so.

Hab. Australia.

126. Thynnus signatus. B.M.

Female. Length $4\frac{3}{4}$ lines.—Ferruginous: the abdomen with five broad yellow fasciæ, the three apical ones slightly interrupted; all the fasciæ with a ferruginous spot or line at their lateral margins; the head and thorax punctured; the metathorax blackish.

Hab. Australia.

127. Thynnus punctatus. B.M.

Female. Length $4\frac{1}{4}$ lines.—Head and thorax brownish-black; the abdomen black, entirely covered with punctures, those on

the head and thorax strongest; thorax strangulated in the middle; the metathorax oblique.

Hab. Australia.

128. THYNNUS FLAVOFASCIATUS. B.M.

Female. Length 4½ lines.—Head and thorax rufo-ferruginous; the head posteriorly, the thorax in front, and two large oblique maculæ on the metathorax, yellow; the tibiæ serrated exteriorly; the abdomen dark ferruginous, with five broad yellow bands, the second and third narrowest, and the apical one slightly interrupted in the middle.

Hab. Australia (Swan River).

129. THYNNUS TRISULCATUS. B.M.

Female. Length 3 lines.—Black: head and thorax strongly punctured; antennæ and mandibles ferruginous; legs rufo-piceous, with the tarsi paler; thorax transverse in front, produced into a neck, deeply strangulated in the middle; metathorax narrow at the base, rounded and widened at the apex; abdomen with shallow punctures, the second segment with three transverse deep furrows.

Hab. Australia.

130. THYNNUS LÆVIFRONS. B.M.

Female. Length 4 lines.—Nigro-piceous: head compressed, very smooth and shining; flagellum fulvous beneath; mandibles rufo-testaceous; the anterior margin of the thorax rounded, notched in the middle, the notch continued into an abbreviated channel; the metathorax oblique, narrowed at the base; abdomen with fine shallow punctures, the second segment with four deep transverse furrows.

Hab. Australia.

131. THYNNUS CONNECTENS. B.M.

Female. Length 5½ lines.—Dark rufo-fuscous: the head rufo-testaceous, smooth and shining; the metathorax obliquely truncate; an irregular narrow transverse band on the first segment of the abdomen, a spot on each side of the second, the three following with broad bands slightly interrupted, the bands with a minute ferruginous spot laterally; the apical segment longitudinally striated.

Hab. West Australia.

132. Thynnus longiceps. B.M.

Female. Length $2\frac{3}{4}$ lines.—Black, smooth, and shining: the antennæ, mandibles, and tarsi pale rufo-testaceous; the head oblong, narrowed behind; the prothorax with a deep central depression in front; the intermediate and posterior tibiæ serrated; the second segment transversely striated, the margins of the segments pale testaceous.

Hab. Tasmania.

133. Thynnus rotundiceps. B.M.

Female. Length 4 lines.—Blackish-brown, with the antennæ, face anteriorly, mandibles, tarsi, margins of the abdominal segments, and the tip of the abdomen, rufo-testaceous; the head rounded and flattened, with the eyes placed very forward at the sides, close to the base of the mandibles.

Hab. Australia.

134. Thynnus planifrons. B.M.

Female. Length 3 lines.—Black, with a brown tinge: the head very smooth and shining; the thorax and abdomen with large distant punctures; the flagellum of the antennæ and apical joints of the tarsi pale rufo-testaceous; the apical margins of the abdominal segments pale testaceous; the second segment with a deep transverse channel.

Hab. Australia.

Species of South America and Brazil.

135. Thynnus (Telephoromyia) rufipes.

Telephoromyia rufipes, *Guér. Voy. Coq. Zool.* ii. 216 ♂.
Thynnus rufipes, *Klug, Berl. Abhandl.* (1842) 41. 59.

Hab. Chili (Patagonia).

136. Thynnus (Onodontyra) tricolor.

Onodontyra tricolor, *Westw. Proc. Zool. Soc. Lond.* (1835) pl. 3. 71 ♂.
Thynnus tricolor, *Klug, Berl. Abhandl.* (1842) 40. 57.

Hab. Chili.

137. Thynnus (Orneptes) nigriceps.

Orneptes nigriceps, *Guér. Voy. Coq. Zool.* ii. 239 ♂; *Mag. Zool.* (1842) *Mon. Thynn.* p. 14. pl. 104.
Thynnus nigriceps, *Klug, Berl. Abhandl.* (1842) 42. 60.

Hab. Chili.

138. Thynnus (Elaphroptera) pallidipennis. B.M.

Myrmosa dimidiata, *Halid. Linn. Trans.* xvii. 328. 46 ♂.
Elaphroptera dimidiata, *Guér. Voy. Coq. Zool.* ii. 240; *Mag. Zool.* (1842) *Mon. Thynn.* p. 14. pl. 105.
Elaphroptera pallidipennis, *Guér. Voy. Coq. Zool.* ii. 241.
Thynnus dimidiatus, *Klug, Berl. Abhandl.* (1842) 38. 49.
Hab. Chili.

139. Thynnus (Elaphroptera) ater.

Elaphroptera atra, *Guér. Voy. Coq. Zool.* ii. 241 ♂; *Mag. Zool.* (1842) *Mon. Thynn.* p. 14. pl. 105.
Thynnus ater, *Klug, Berl. Abhandl.* (1842) 39. 53 ♂.
Hab. Chili.

140. Thynnus fasciatus.

Elaphroptera fasciata, *Guér. Voy. Coq. Zool.* ii. 242; *Mag. Zool.* (1842) *Mon. Thynn.* p. 14. pl. 105.
Thynnus fasciatus, *Klug, Berl. Abhandl.* (1842) 25. 21.
Hab. Patagonia.

141. Thynnus cornutus.

Elaphroptera cornuta, *Guér. Voy. Coq. Zool.* ii. 243 ♂; *Mag. Zool.* (1842) *Mon. Thynn.* p. 14. pl. 105.
Thynnus cornutus, *Klug, Berl. Abhandl.* (1842) 33. 39.
Hab. Brazil.

142. Thynnus maculipennis.

Elaphroptera maculipennis, *Guér. Voy. Coq. Zool.* ii. 243 ♂; *Mag. Zool.* (1842) *Mon. Thynn.* p. 14. pl. 105.
Thynnus maculipennis, *Klug, Berl. Abhandl.* (1842) 26. 24.
Hab. Brazil.

143. Thynnus apicalis.

Elaphroptera apicalis, *Guér. Voy. Coq. Zool.* ii. 244 ♂.
Thynnus apicalis, *Klug, Berl. Abhandl.* (1842) 27. 27; *Mag. Zool.* (1842) *Mon. Thynn.* p. 14. pl. 105.
Hab. Brazil.

144. Thynnus (Ammodromus) frontalis.

Ammodromus frontalis, *Guér. Voy. Coq. Zool.* ii. 245 ♂ ; *Mag. Zool.* (1842) *Mon. Thynn.* p. 15. pl. 105.
Thynnus frontalis, *Klug, Berl. Abhandl.* (1842) 37. 47.

Hab. Patagonia.

145. Thynnus (Ammodromus) ruficeps.

Ammodromus ruficeps, *Guér. Voy. Coq. Zool.* ii. 245 ♀.
Thynnus ruficeps, *Klug, Berl. Abhandl.* (1842) 37. 48.

Hab. Brazil (Currientes).

146. Thynnus (Ammodromus) Scoliæformis.

Myrmecodes scoliæformis, *Halid. Linn. Trans.* xvii. 327. 45 ♀.
Ammodromus scoliæformis, *Guér. Voy. Coq. Zool.* ii. 246.
Thynnus scoliæformis, *Klug, Berl. Abhandl.* (1842) 38. 50.

Hab. Chili.

147. Thynnus (Ammodromus) varius.

Myrmecoda varia, *Perty, Del. An. Art.* p. 138. t. 27. f. 10 ♀.
Ammodromus varius, *Guér. Voy. Coq. Zool.* p. 246.
Thynnus varius, *Klug, Berl. Abhandl.* (1842) 30. 32.

Hab. Brazil.

148. Thynnus (Amblysoma) Latreillii.

Thynnus (Amblysoma) Latreillii, *Westw. Guérin's Mag. Zool.* (1841–2) pl. 80 ♂.

Hab. Brazil.

149. Thynnus ichneumoneus.

Thynnus ichneumoneus, *Klug, Berl. Abhandl.* (1842) 25. 22.

Hab. Brazil.

150. Thynnus consobrinus.

Thynnus consobrinus, *Klug, Berl. Abhandl.* (1842) p. 26. 23.

Hab. Brazil.

151. Thynnus interruptus.

Thynnus interruptus, *Klug, Berl. Abhandl.* (1842) 26. 25 ♂.

Hab. Brazil.

152. THYNNUS ANALIS.

Thynnus analis, *Klug, Berl. Abhandl.* (1842) 27. 26 ♂.
Hab. Brazil.

153. THYNNUS MYSTACINUS.

Thynnus mystacinus, *Klug, Berl. Abhandl.* (1842) 27. 28 ♂.
Hab. Brazil.

154. THYNNUS HÆMORRHOIDALIS.

Thynnus hæmorrhoidalis, *Klug, Berl. Abhandl.* (1842) 28. 29 ♂.
Hab. Brazil.

155. THYNNUS PICTUS.

Thynnus pictus, *Klug, Berl. Abhandl.* (1842) 29. 30 ♀.
Hab. Brazil.

156. THYNNUS ORNATUS.

Thynnus ornatus, *Klug, Berl. Abhandl.* (1842) 29. 31 ♀.
Hab. Brazil.

157. THYNNUS INTERMEDIUS.

Thynnus intermedius, *Klug, Berl. Abhandl.* (1842) 30. 33 ♀.
Hab. Brazil.

158. THYNNUS PUBESCENS.

Thynnus pubescens, *Klug, Berl. Abhandl.* (1842) 31. 34 ♂.
Hab. Brazil.

159. THYNNUS LEPIDUS.

Thynnus lepidus, *Klug, Berl. Abhandl.* (1842) 31. 35 ♂.
Hab. Brazil.

160. THYNNUS VINCULATUS.

Thynnus vinculatus, *Klug, Berl. Abhandl.* (1842) 32. 36.
Hab. Brazil.

161. THYNNUS TRIFASCIATUS.

Scotena trifasciata, *Klug, Mag. d. Ges. Nat. Fr. z. Berl.* iv. p. 40. t. 1. f. 4 ♂.
Thynnus trifasciatus, *Klug, Berl. Abhandl.* (1842) 32. 37.
Hab. Brazil.

162. THYNNUS HISTRIO.
Thynnus histrio, *Klug, Berl. Abhandl.* (1842) 33. 38 ♂.
Hab. Brazil.

163. THYNNUS VERSICOLOR.
Thynnus versicolor, *Klug, Berl. Abhandl.* (1842) 34. 40 ♂.
Hab. Brazil.

164. THYNNUS LATERALIS.
Thynnus lateralis, *Klug, Berl. Abhandl.* (1842) 34. 41. f. 6 ♂.
Hab. Brazil.

165. THYNNUS CLITELLATUS.
Thynnus clitellatus, *Klug, Berl. Abhandl.* (1842) 35. 42. f. 5 ♀.
Hab. Brazil (Minas Geraes).

166. THYNNUS SPHEGEUS.
Thynnus sphegeus, *Klug, Berl. Ahhandl.* (1842) 35. 43 ♂.
Hab. Brazil.

167. THYNNUS QUADRICINCTUS.
Thynnus quadricinctus, *Klug, Berl. Abhandl.* (1842) 36. 44 ♂.
Hab. Brazil.

168. THYNNUS VULPINUS.
Thynnus vulpinus, *Klug, Berl. Abhandl.* (1842) 36. 45 ♂.
Hab. Brazil.

169. THYNNUS HÆMATODES. Plate III. fig. 16 ♂.
Thynnus hæmatodes, *Klug, Berl. Abhandl.* (1842) 37. 46. f. 7 ♂, f. 8 ♀.
Hab. Brazil.

170. THYNNUS ÆTHIOPS. B.M.
Thynnus æthiops, *Klug, Berl. Abhandl.* (1842) 38. 51 ♂.
Hab. Brazil.

171. THYNNUS ANTHRACINUS.
Thynnus anthracinus, *Klug, Berl. Abhandl.* (1842) 39. 52 ♂.
Hab. Brazil.

172. Thynnus tarsatus.

Thynnus tarsatus, *Klug, Berl. Abhandl.* (1842) 39. 54 ♂.

Hab. Brazil.

173. Thynnus philanthoides.

Thynnus philanthoides, *Klug, Berl. Abhandl* (1842) 40. 55. f. 9 ♂.

Hab. Brazil (Porto Alegre).

174. Thynnus scutellaris.

Thynnus scutellaris, *Klug, Berl. Abhandl.* (1842) 40. 56 ♂.

Hab. Brazil (St. Joao del Rey).

175. Thynnus lætus.

Thynnus lætus, *Klug, Berl. Abhandl.* (1842) 41. 58. f. 10 ♂.

Hab. Chili.

176. Thynnus elegans. — Col

Male. Length 9 lines.—Black, variegated with yellow: the mandibles, clypeus, face on each side of it, and a broad stripe behind the eyes, yellow. The anterior and posterior margins of the prothorax, a large oblong macula beneath the wings, the scutellum, post-scutellum, and metathorax, yellow; the legs pale ferruginous, the femora yellow beneath, above black; wings slightly coloured, with a fuscous cloud occupying the apex of the marginal and the third submarginal cells. Abdomen: the basal segment yellow, with a black line down the middle, the following segments with a large ovate macula on each side; the head and thorax with confluent punctures; the abdomen with close, fine, shallow punctures.

Hab. South America.

177. Thynnus decorus. B.M.

Male. Length 6 lines.—Black, shining, and punctured throughout; not very closely so: the clypeus, mandibles, inner orbits of the eyes, and an abbreviated line behind them, yellow. The anterior and posterior margins of the prothorax yellow, the former slightly, the latter widely interrupted; the tegulæ, an irregularly-shaped spot beneath the wings, a spot on the disk of the mesothorax, a lunate one on the scutellum, the post-scutellum and a spot on each side, and a large curved spot on each side of the metathorax nearly meeting in the middle, yellow; wings hyaline and iridescent, with a dark fuscous cloud in the marginal

cell, the apical margins faintly clouded. Abdomen: the margins of the segments constricted; the basal segment with a fascia, and the second, third, and fourth with an interrupted one a little before their apical margins, the fascia widened at the lateral margins of the segments; the apical segment rugose, with elongate punctures.

Hab. Brazil (Santarem).

178. Thynnus plagiatus.

Male. Length 7½ lines.—Black: the clypeus, sides of the face, a spot above each antenna, the mandibles, and head behind the eyes, yellow. Thorax: the anterior and posterior margins of the prothorax, a quadrate spot in the middle of the mesothorax, the tegulæ in front and a spot behind them, the scutellum, post-scutellum, and metathorax, yellow; the femora yellow beneath; the anterior tibiæ and all the tarsi ferruginous; the wings hyaline, the nervures ferruginous; a fuscous spot occupies the apex of the marginal cell and the third submarginal cell. Abdomen: the first and four following segments with a large ovate yellow spot on each side.

Hab. South America.

179. Thynnus (Agriomyia) gratiosus.

Male. Length 9 lines.—Black: finely punctured on the head and thorax; the seven apical joints of the antennæ arcuate; the inner orbits of the eyes, the lower portion of the outer orbits, a narrow line on the posterior margin of the vertex, which unites with the yellow line on the cheeks and is interrupted in the middle above, a spot between the ocelli, another at the insertion of each antenna, a spot on the clypeus, and the mandibles, yellow. Thorax: the anterior and posterior margins of the prothorax, three small oblong spots on the mesothorax, a line over the tegulæ, a spot on the scutellum and a smaller one at its basal angles, the post-scutellum, and the sides of the metathorax, yellow, the latter with a large irregularly-shaped black blotch; an irregular curved stripe beneath the wings, the femora beneath, and the coxæ spotted with yellow; the wings fulvo-hyaline. Abdomen: the four basal segments yellow, with their basal and apical margins ferruginous, and a number of small ferruginous spots at the lateral margins; an oblong black stain on the basal segment, emitting a short fork on each side at its apex; the sixth segment with an angular reddish-yellow spot on each side.

Hab. South America. (Coll. W. W. Saunders, Esq.)

180. Thynnus (Agriomyia) amplipennis.

Male. Length 9 lines.—Shining black : head and thorax very closely punctured, the metathorax very delicately punctured and shining; the scutellum elevated into a tubercle; wings ample and of a rich golden-fulvous colour, the nervures ferruginous. Abdomen : the first segment much narrowed at the base, which has a deep abbreviated channel; the margins of the segment slightly depressed, covered with short black pubescence, and with a number of longer hairs at the tip; the head, sides of the thorax, and the anterior and intermediate tibiæ with long black hairs.

Hab. South America. (Coll. W. W. Saunders, Esq.)

Genus 2. ÆLURUS.

Agriomyia, pt., *Guér. Mag. Zool.* p. 5 (1842).
Ælurus, *Klug, Berl. Abhandl.* 42 (1840–42).

Species of Australia.

1. Ælurus abdominalis. B.M.

Agriomyia abdominalis, *Guér. Mag. Zool.* p. 5 (1842).
Ælurus abdominalis, *Westw. Arc. Ent.* ii. 122. pl. 77. f. 5 ♂.
Thynnus fervidus, *Erichs. Wiegm. Arch.* (1842) 263. 237 ♂.
Westw. Arc. Ent. ii. 146.

Hab. Tasmania.

Of this species, which has the head and thorax black and the abdomen red, I have seen a fine variety with the thorax also red, having only a few dusky stains behind the scutellum, in the Collection of R. Bakewell, Esq.

2. Ælurus mœrens.

Ælurus mœrens, *Westw. Arc. Ent.* ii. 124 ♂.

Hab. Australia (Melbourne).

3. Ælurus Spinolæ.

Agriomyia Spinolæ, *Guér. Mag. Zool.* (1842) p. 6.

Hab. Australia.

4. Ælurus incanus. B.M.

Male. Length 7 lines.—Black : the head and thorax with strong confluent punctures, the metathorax more finely punctured, shining, and with long cinereous pubescence, the cheeks

with a long beard of the same colour; the wings hyaline, very slightly coloured, with a fuscous cloud at the apex of the marginal cell; the tibiæ and tarsi ferruginous, the apical joints of the latter fuscous. Abdomen shining and covered with shallow punctures, the base and beneath with cinereous pubescence; the apical ventral segment rounded at the apex, and with a minute tooth in the middle.

Hab. Australia (Port Stephen).

5. ÆLURUS SENEX. B.M.

Male. Length 5 lines.—Black: the head and thorax strongly punctured; the abdomen shining, slightly and delicately punctured; the face covered with cinereous pubescence, the cheeks with a long fringe of the same colour; the cheeks have a short, stout, acute tooth close to the base of the mandibles. The thorax with long loose cinereous pubescence; the mesothorax strongly punctured; the metathorax shining and finely punctured; the wings slightly coloured, with the nervures black. The abdomen shining and delicately punctured, the base and apex of the abdomen more strongly punctured; the basal segment with a central deeply impressed line; beneath and at the apex is a thin, long, loose pubescence; the apical ventral segment with a central acute tooth and a short rounded one on each side, and a short acute one outside.

Hab. Australia.

6. ÆLURUS AURIFRONS. B.M.

Male. Length 7½ lines.—Black, with the legs, the apical margin of the basal segment, and the second and third entirely red; the face and cheeks with a golden-yellow pubescence; the sides of the head fringed with long pale yellow hairs; a short blunt tooth on the cheeks, close to the base of the mandibles. Thorax: the disk with golden-coloured pubescence; the metathorax, sides, and beneath with cinereous; the coxæ and trochanters black; the wings flavo-hyaline, the nervures ferruginous, the costal nervure blackish. Abdomen smooth and shining; the second segment beneath, tuberculate in the middle of its base; the apical segment rounded, with an acute spine in the middle.

Hab. W. Australia.

7. ÆLURUS VULPINUS. B.M.

Male. Length 7 lines.—Black: head and thorax very closely punctured and opake; the abdomen shining and delicately punc-

tured; the clypeus with the centre of its anterior margin testaceous; the mandibles ferruginous at their apex; the sides of the head and the mandibles with a long fringe of white pubescence; the face pubescent; a sharp tooth on the cheeks at the base of the mandibles. The thorax with white pubescence; the wings fulvo-hyaline, with a fuscous cloud at the apex of the marginal cell; the legs ferruginous, with the coxæ and base of the femora black. Abdomen: the apical ventral segment rounded, and having an acute spine in the middle.

Hab. Australia (Hunter River).

8. ÆLURUS BASALIS. Plate III. fig. 6 ♂. B.M.

Male. Length 6 lines.—Black and punctured: the clypeus with a central smooth shining carina, the anterior margin shining and truncate; the mandibles ferruginous towards their apex, the tips black; the cheeks produced into a stout spine at the base of the mandibles, with a long fringe of pale pubescence. Thorax: the posterior margin of the prothorax rufo-testaceous; the wings hyaline, the nervures dark fuscous, the tegulæ ferruginous; the legs ferruginous, with the coxæ and base of the femora black. Abdomen subpetiolate, delicately and distantly punctured; the basal segment closely punctured, with a central longitudinal impressed line, its apical margin, the second segment, and the sides of the third ferruginous; the apical ventral segment with a short spine at the apex, emanating from an angular process, which has a minute tooth at its base.

Hab. Australia.

9. ÆLURUS COMBUSTUS. B.M.

Male. Length 6½ lines.—Black and punctured: the margin of the tubercles above the insertion of the antennæ, the clypeus anteriorly, and the margins of the face on each side rufo-testaceous; the mandibles ferruginous, with their inner margin testaceous; the face with long glittering pale pubescence; the mandibles and lateral margins of the head with a long fringe of pale pubescence; a spine on the cheeks at the base of the mandibles. Thorax: the anterior margin of the prothorax pale testaceous, the posterior margin rufo-testaceous; wings hyaline, their nervures dark fuscous, becoming ferruginous towards their base, the tegulæ ferruginous. Abdomen black above, with the sides and beneath ferruginous; the apical margins of the segments narrowly ferruginous; the apical ventral segment rounded, with a slender acute spine in the middle.

Hab. Australia (Moreton Bay).

10. ÆLURUS PILOSULUS.

Male. Length 5½–7 lines.—Black: the head and disk of the thorax clothed with fulvous pubescence, the sides of the head with a long curled fringe of the same colour, the pubescence becoming very pale in worn specimens; the thorax beneath and the metathorax with cinereous pubescence; the abdomen covered with changeable pile, in certain lights having a golden lustre. The mandibles and legs ferruginous, the coxæ black; the cheeks produced into an acute tooth at the base of the mandibles; the posterior margin of the prothorax more or less rufo-testaceous; the wings hyaline, the nervures ferruginous; the abdomen subpetiolate; the apex with a short acute spine.

Hab. S. Australia (Lower Plenty). (Coll. R. Bakewell, Esq.)

11. ÆLURUS RUBELLUS.

Male. Length 4½ lines.—Black: head and thorax rugose, the metathorax punctured; the tips of the mandibles, the tibiæ, the tarsi, and the apex of the femora more or less ferruginous; the cheeks produced into an acute tooth at the base of the mandibles. The head and the thorax above with long fulvous pubescence; the sides of the thorax and the metathorax with cinereous pubescence; the wings hyaline, the nervures testaceous. Abdomen shining, subpetiolate, and with distant shallow punctures; the basal segment with a deeply impressed longitudinal line in the middle, not extending to the apex of the segment; the apical margin of the basal segment, the second, third, and base of the third at the sides, ferruginous; sometimes the second segment and base of the third at the sides only, ferruginous; beneath, the second, third, and sometimes the fourth, ferruginous; the apical ventral segment with a deep notch on each side and a slighter one within, and having in the middle an acute spine curved upwards.

Hab. S. Australia (Lower Plenty). (Coll. R. Bakewell, Esq.)

12. ÆLURUS FULVIFRONS.

Male. Length 6 lines.—Black: the head and the mesothorax thinly covered with short fulvous pubescence, that on the cheeks, thorax beneath, and on the metathorax, cinereous; the anterior margin of the clypeus and of the face on each side, and the mandibles, yellow. The margins of the prothorax, the tegulæ, an ovate spot on the scutellum, and the post-scutellum, yellow; the legs ferruginous, the coxæ and trochanters black; the wings hyaline, the nervures dark fuscous. Abdomen subpetiolate, smooth and shining, with an ovate yellowish-white macula on

each side of the second, third, and fourth segments; the terminal ventral segment lanceolate, with a sharp spine at the apex.

Hab. S. Australia (Lower Plenty).

Female. Length 3 lines.—Rufo-fuscous: the antennæ, mandibles, and legs pale rufo-testaceous; the head smooth and shining; the second segment of the abdomen with four deep transverse grooves; the apical segment ferruginous. (Coll. R. Bakewell, Esq.)

13. ÆLURUS BARBATUS.

Male. Length 6 lines.—Black: head and thorax rugose and thinly covered with cinereous pubescence, the sides of the head with a long curled fringe of the same colour; the cheeks produced into a short spine at the base of the mandibles; behind the eyes is an obscure ferruginous stripe. Thorax: the tips of the femora, the tibiæ, and the tarsi ferruginous; the wings hyaline, with a slight fulvous tinge; a small fuscous cloud in the marginal cell. Abdomen subpetiolate and shining; the apical ventral segment rounded at the apex, and with a minute tooth in the middle.

Female. Length 3¼ lines.—Dark fusco-ferruginous: the head anteriorly, the mandibles, the thorax, legs, and two basal segments of the abdomen, rufo-testaceous, the mandibles and prothorax palest; the thorax closely punctured, the head more sparingly so. Abdomen finely rugose, with a smooth shining space at the base of the segments, the second segment transversely coarsely and irregularly striated.

Hab. S. Australia (Lower Plenty). (Coll. R. Bakewell, Esq.)

14. ÆLURUS DENTATUS.

Male. Length 5½ lines.—Black: head and thorax rugose, the abdomen shining and subpunctate. Head transverse; the posterior margin of the vertex widely and very slightly emarginate; thinly covered with fulvous pubescence, the sides of the head with a long curled beard of the same; the mandibles ferruginous at their apex; close to their base the cheeks are produced into a short, stout, acute tooth. Thorax: the sides and beneath with griseous pubescence, on the disk it is slightly fulvous; wings hyaline, the nervures dark fuscous; the tibiæ and tarsi ferruginous. Abdomen subpetiolate; the basal segment with a central impressed line, not extending to the apex, and with a minute tooth on each side a little before the middle; the apical ventral segment truncate, with a short acute spine in the middle which emanates from a small truncate base.

Female. Length 4 lines.—The head, thorax, legs, and basal segment of the abdomen obscure blood-red, the rest of the abdomen black; the head, thorax, and base of the segments of the abdomen strongly punctured, the basal segment rugose.

Hab. S. Australia (Lower Plenty). (Coll. R. Bakewell, Esq.)

15. ÆLURUS FERVENS.

Male. Length 5½ lines.—Black: the head and thorax closely punctured, the metathorax finely so; the abdomen shining, and covered with fine, very shallow punctures. The head and disk of the thorax with a pale fulvous pubescence, on the sides of the thorax and beneath it is cinereous. The anterior margin of the appendage, beneath which the antennæ are inserted, yellow; the clypeus anteriorly and the mandibles yellow, the latter ferruginous at their apex; the sides of the head with a long fringe of pale hairs. The anterior and posterior margins of the prothorax yellow, the yellow colour uniting in the middle; the tegulæ and post-scutellum yellow; wings hyaline, the marginal cell with a slight fuscous cloud; the legs ferruginous, with the coxæ and trochanters black. The apical ventral segment emarginate at the apex, with a central acute spine.

Hab. S. Australia (Lower Plenty). (Coll. R. Bakewell, Esq.)

Species of Brazil.

16. ÆLURUS NASUTUS. Plate III. fig. 7 ♀.

Ælurus nasutus, *Klug, Berl. Abhandl.* (1842) 43. 1. f. 11 ♂, 12 ♀.

Hab. Brazil.

17. ÆLURUS CLYPEATUS.

Ælurus clypeatus, *Klug, Berl. Abhandl.* (1842) 43. 2 ♂.

Hab. Brazil.

Genus 3. ARIPHRON.

Ariphron, *Erichs. Wiegm. Arch.* (1842) p. 264.

1. ARIPHRON BICOLOR. Plate III. fig. 13 ♀.

Ariphron bicolor, *Erichs. Wiegm. Arch.* (1842) 266. 239. t. 5. f. 8, 8*a* ♀.

Westw. Arc. Ent. ii. 146.

Hab. Tasmania.

Notwithstanding the remarkable form of this insect, it is very

probable the discovery of the male will prove that it belongs to the genus *Ælurus*: this observation may serve to direct attention to this probability.

Genus 4. ANTHOBOSCA.

Anthobosca, *Guér. Voy. Coq. Zool.* ii. 237 (1830).
Thynnus, pt., *Klug, Berl. Abhandl.* 29 (1840–42).

1. Anthobosca Australasiæ.

Anthobosca Australasiæ, *Guér. Voy. Coq. Zool.* ii. 237, *Atlas, Ins.* pl. 8. fig. 10; *Mag. Zool.* (1842) *Mon. Thynn.* p. 13. pl. 104 (var.).
Thynnus Australasiæ, *Klug, Berl. Abhandl.* (1842) 24. 20 ♂.

Hab. Australia (Port Jackson).

2. Anthobosca nigra.

Male. Length 5½ lines.—Black; slightly shining: head and thorax strongly punctured, the abdomen very delicately so; covered with a short downy cinereous pubescence, most sparing and shortest on the abdomen. Antennæ short and stout, not so long as the abdomen; the clypeus truncated anteriorly; wings very slightly coloured, the nervures black; the anterior tibiæ fulvous within, the calcaria pale testaceous; the abdomen slightly depressed above, the terminal segment with its upper and also its ventral plate rounded at the apex.

Hab. Australia (Port Philip).

3. Anthobosca varipes. B.M.

Male. Length 4½–6 lines.—Black: the femora, tibiæ, and basal joints of the tarsi ferruginous, sometimes only the anterior tibiæ red within, sometimes entirely black; the calcaria and spines on the tarsi white, covered with a fine white, short, silky down; the head, thorax on the sides and beneath with longer cinereous pubescence; the antennæ stout, and shorter than the head and thorax, both the latter closely punctured; the wings hyaline, the nervures black. Abdomen delicately reticulated.

Hab. S. Australia (Lower Plenty).

4. Anthobosca Crabroniformis. B.M.

Male. Length 5½ lines.—Black: head and thorax very closely and finely punctured; the clypeus, mandibles, and inner orbits of the eyes yellow. Thorax: a large transverse bilobed macula on the prothorax, a spot on its side at the base of the anterior

coxæ, the tegulæ, a spot on the disk of the mesothorax, a subquadrate one on the scutellum, the post-scutellum, and a central and two lateral spots at the apex of the metathorax, yellow; wings subhyaline, nervures ferruginous. Abdomen: a subovate spot on each side of the second segment; a transverse line in the middle of the three following segments, interrupted in the middle, each line in succession narrower than the preceding.

Hab. Australia?

Genus 5. RHAGIGASTER.

Thynnus, pt., *Fabr. Syst. Ent.* 360 (1804).
Bethylus, pt., *Fabr. Syst. Piez.* 238 (1804).
Diamma, *Guér. Voy. de l'Astr.* 235.
Rhagigaster, *Guér. Voy. Coq. Zool.* ii. 214 (1830).
Thynnus, pt., *Klug, Berl. Abhandl.* 23 (1842).

1. Rhagigaster integer.

Thynnus integer, *Fabr. Syst. Ent.* p. 360. 3 ♂; *Ent. Syst.* ii. 245. 4; *Syst. Piez.* p. 231. 4.
Donov. Epit. Ins. New Holl., Pl. Hym. Dipt. fig. *.*.
Kirby, Mon. Ap. Angl. i. 223.
Guér. Voy. Coq. Zool. ii. 229.
Rhagigaster integer, *Westw. Arc. Ent.* ii. 105. 6.

Hab. Australia.

This insect, which is unique in the Banksian Collection, has a very close general resemblance to a species of *Cœlioxys*; but it is a true Thynnideous insect, belonging to the genus *Rhagigaster*. Fabricius describes it as follows:—"Antennæ nigræ. Caput nigrum, fronte tomento cinereo pubescente. Thorax ater, immaculatus, scutello truncato, obtuso. Abdomen cylindricum, segmentis in medio atris, margine omni villoso cinereo. Anus integer, aculeo brevi, recurvo." The following particulars, obtained by an examination of the typical specimen, may be useful:—

Male. Length 6 lines.—Shining black: the face clothed with dense, long, pale yellowish pubescence; a transverse ridge on the front, and a horseshoe-shaped fovea above it, in which is placed a single ocellus; the clypeus deeply notched in front; the vertex with distant yellow punctures. The prothorax with its anterior margin raised, and covered with transverse striæ; the mesothorax with a longitudinal ridge on each side; the scutellum highly polished and truncate behind; the metathorax is depressed, rugose, and truncate behind; the wings hyaline, the

nervures black. Abdomen: all the segments with a fascia of silvery-white hairs at their basal and apical margins, the fasciæ attenuated in the middle, the space between smooth, shining, and with a few scattered punctures; the apical segment longitudinally sulcated, its posterior margin rounded and entire.

2. Rhagigaster apterus.

Bethylus apterus, *Fabr. Syst. Piez.* p. 238. 7 ♀.
Rhagigaster? apterus, *Westw. Arc. Ent.* ii. 106. 9.

Hab. New South Wales.

3. Rhagigaster unicolor. B.M.

Rhagigaster unicolor, *Guér. Voy. Coq. Zool.* ii. 214 (1830) ♂.
Diamma ephippiger, *Guér. Voy. de l'Astrol.* p. 235 ♀; *Mag. Zool.* (1842) pl. 103. f. 1, 6.
Thynnus unicolor, *Klug, Berl. Abhandl.* (1842) 23. 18.
Rhagigaster ephippiger, *Westw. Arc. Ent.* ii. 105.

Hab. Tasmania (Port Jackson).

4. Rhagigaster mandibularis. B.M.

Rhagigaster mandibularis, *Westw. Arc. Ent.* ii. 105. 3 ♂.

Hab. Port Philip.

5. Rhagigaster Morio. B.M.

Rhagigaster Morio, *Westw. Arc. Ent.* ii. 105. 4 ♂.

Hab. Australia.

6. Rhagigaster binotatus. B.M.

Rhagigaster binotatus, *Westw. Arc. Ent.* ii. 105. 7 ♀.

Hab. Tasmania.

7. Rhagigaster analis.

Rhagigaster analis, *Westw. Arc. Ent.* ii. 106. 8 ♀.

Hab. Australia (King George's Sound).

8. Rhagigaster? ruficornis.

Myzine ruficornis, *Guér. Prodr. Mon. Myzines*, p. 11.
Thynnus ruficornis, *Guér. Mag. Zool.* pl. 99.
Rhagigaster? ruficornis, *Westw. Arc. Ent.* ii. 106 ♂.

Hab. Arabia.

9. Rhagigaster hæmorrhoidalis. B.M.

Rhagigaster hæmorrhoidalis, *Guér. Mag. Zool.* (1842) 2 ♂.

Hab. Australia (Swan River).

10. Rhagigaster dimidiatus.

Male. Length 9 lines.—Head, antennæ, thorax, anterior legs, and the intermediate and posterior coxæ, black; the intermediate and posterior tibiæ, tarsi, and femora, and also the abdomen, ferruginous; the head and thorax with a thin cinereous pubescence; the wings fusco-hyaline; the disk of the thorax transversely rugose; the abdomen with scattered shallow punctures; a transverse line on each segment a little before its apical margin, the intervening space very closely punctured; the terminal segment rounded at the apex and coarsely longitudinally rugose.

Female. Length 5 lines.—Black, elongate, with the intermediate and posterior legs, the anterior tarsi, and the two apical segments of the abdomen, ferruginous; the head, thorax, and basal segment of the abdomen with deep punctures, the second segment transversely and finely striated, the apical segment longitudinally striated.

Hab. Australia (Sydney).

11. Rhagigaster obtusus.

Male. Length 8 lines.—Black, slightly shining, and thinly covered with griseous pubescence; head roughly punctured, the clypeus widely emarginate. Thorax roughly punctured; the prothorax with elongate transverse punctures, the anterior margin reflexed; the metathorax truncated, the truncation hollowed out on each side and transversely rugose; the disk very coarsely punctured; the wings subhyaline, the nervures black. Abdomen elongate, subcylindrical, strongly punctured; each segment has an impressed transverse line a little before the apical margin, the space between which and the margin is more finely and much more closely punctured; each segment with an oblique, smooth, shining elevation on each side; the apical segment rounded at the apex and longitudinally coarsely rugose.

Hab. Adelaide.

12. Rhagigaster reflexus.

Male. Length 7 lines.—Black: the head and thorax with confluent punctures; head produced behind the eyes, rounded behind. Thorax oblong-quadrate, the sides before the wings parallel, the metathorax truncate; the disk of the thorax coarsely rugose; the anterior margin reflexed, produced laterally, and

subspinose; wings subhyaline, the nervures black. Abdomen truncate at the base, strongly punctured; the margins of the segments constricted.

Hab. Australia (Swan River).

13. Rhagigaster tristis.

Male. Length 5 lines.—Black: head and thorax opake, covered with confluent punctures; the clypeus truncate; the mesothorax with coarse deep punctures, those on the metathorax finer; the wings hyaline and iridescent, the nervures black. Abdomen shining, roughly punctured; the margins of the segments constricted; the apical segment with coarse punctures at the base, its apex smooth, shining, and rounded.

Hab. Western Australia.

14. Rhagigaster apicalis. B.M.

Male. Length 9 lines.—Black: the head and thorax coarsely rugose and subopake; abdomen punctured and shining, the margins of the segments constricted, and the two apical segments red. The clypeus with a raised central carina, which runs upwards to the anterior stemma; at the base of the clypeus an oblique carina emanates on each side, running upwards to an irregular transverse one in front of the anterior stemma; the antennæ stout, and shorter than the thorax; wings hyaline, the nervures black; the sides of the prothorax parallel, its anterior margin slightly reflexed; the metathorax truncate.

Hab. Australia.

This species is similarly coloured to the *R. hæmorrhoidalis* of Guérin, but is much larger, and is readily distinguished by its carinated clypeus and truncated thorax.

15. Rhagigaster castaneus.

Female. Length 3½ lines.—Chestnut-red: the head shining, with scattered punctures, the face rugose. Thorax with large scattered punctures, the metathorax oblique; abdomen finely punctured.

Hab. Australia.

16. Rhagigaster nitidus.

Female. Length 4 lines.—Shining black, sparingly punctured: the face and antennæ obscurely ferruginous, the mandibles and legs bright ferruginous; the mesothorax with a deep depression

on each side, the metathorax with a shallow depression on each side; the apical segment bright ferruginous.

Hab. Australia.

Genus 6. TACHYPTERUS.

Tachypterus, *Guér. Voy. Coq. Zool.* ii. 216 (1830).
Psammatha, *Shuck. Trans. Ent. Soc.* ii. 68 (1837–40).

1. TACHYPTERUS FASCIATUS.

Tachypterus fasciatus, *Guér. Voy. Coq. Zool.* ii. 217.
Westw. Arc. Ent. ii. 102.

Hab. Australia (Kangaroo Island).

2. TACHYPTERUS CHALYBEUS.

Psammatha chalybea, *Shuck. Trans. Ent. Soc.* ii. 69. pl. 8. f. 1 ♂.
Westw. Arc. Ent. ii. 20. pl. 54. f. 5 ♂.
Tachypterus chalybæus, *Westw. Arc. Ent.* ii. 102.

Hab. Australia (Sydney).

3. TACHYPTERUS CRASSICORNIS. Plate III. fig. 10 ♂. B.M.

Male. Length 5 lines.—Black: the clypeus, the lower portion of the inner orbits of the eyes, the scape in front, the mandibles, palpi, the anterior coxæ and femora in front, and a line on the intermediate and posterior coxæ and trochanters, yellow; the antennæ incrassate, and about the length of the thorax. The wings hyaline and iridescent, the nervures dark testaceous, the stigma blackish; the legs ferruginous; the coxæ, trochanters, anterior and intermediate femora beneath, black; the intermediate and posterior tibiæ serrated exteriorly, the calcaria pale testaceous. Abdomen: the second, third, and extreme base of the fourth segment ferruginous; the abdomen covered with a short, changeable, silky cinereous pubescence; the head and thorax with longer pubescence of the same colour.

Hab. Australia.

The red colouring on the abdomen is more or less obliterated in different individuals; sometimes only the posterior margins of the segments are red or rufo-piceous.

Genus 7. ONCORHINUS.

Oncorhinus, *Shuck. Grey's Journ. Exped. King George's Sound, Append.* ii. 471.

1. Oncorhinus xanthospilos. Plate III. fig. 15 ♂.

Oncorhinus xanthospilos, *Shuck. Grey's Journ. Exped. King George's Sound, Append.* ii. 471 ♂.

Hab. Australia (King George's Sound).

Genus 8. DIAMMA.

Diamma, *Westw. Proc. Zool. Soc.* pt. 3 (1835) p. 53 ♀.

1. Diamma bicolor.

Diamma bicolor, *Westw. Proc. Zool. Soc.* pt. 3. (1835) p. 53 ♀; *Arc. Ent.* ii. 21. pl. 54. f. 6 ♀.
Guér. Voy. Coq. Zool. ii. 235.

Hab. Australia; Van Diemen's Land.

Genus 9. ISWARA.

Iswara, *Westw. Trans. Ent. Soc. Lond.* n. s. i.

1. Iswara luteus.

Iswara luteus, *Westw. Trans. Ent. Soc. Lond.* n. s. i. pl. 7. fig. 5. and details.

Hab. India.

APPENDIX.

THYNNUS MELLEUS.

Female. Length 4 lines.—The head black, smooth, and shining; the antennæ, mandibles, thorax, and abdomen beneath rufo-testaceous, the legs ferruginous. The thorax black and shining above, with a few scattered fine punctures; the anterior margin transverse. Abdomen obscure rufo-fuscous above, the first segment with a few coarse punctures, the second with two transverse grooves, the third, fourth, and fifth segments with their apical margins punctured.

Hab. Adelaide.

The male of this species is described in Westwood's 'Arcana Entomologica' (see *ante* p. 24).

THYNNUS VARIPES.

Male. Length 10 lines.—Black: the head and thorax densely clothed with cinereous pubescence, that on the disk of the latter tinged with yellow. The clypeus and mandibles yellow, the tips of the latter rufo-piceous; the clypeus produced and truncate at the apex. The tibiæ and tarsi sometimes ferruginous, with the apical joints of the tarsi fuscous; the pubescence on the thorax beneath and on the metathorax of a silvery brightness; wings hyaline, the anterior pair slightly coloured, their extreme base fuscous, the nervures black. Abdomen conical, the base truncate, the four basal segments with a transverse yellow band, which is slightly interrupted in the middle, and more widely so on each side; in some examples the bands are not interrupted in the middle, and only emarginate posteriorly at the sides; beneath, the abdomen is entirely black and shining.

Hab. Adelaide.

Note.—Only two specimens have been received, which exhibit the differences described; probably intermediate varieties occur.

THYNNUS PULCHRALIS.

Male. Length 7-7½ lines.—Head and thorax yellow; the vertex and thorax with a fulvous tinge above, the mesothorax black at the sides and beneath; the six basal joints of the antennæ ferruginous, the scape with a yellow spot in front; the mandibles rufo-piceous at their apex. The anterior tibiæ and tarsi ferruginous, and the femora with a yellow stripe at their apex beneath; the wings hyaline, with their base brown. Abdomen black and shining; the base and four basal segments yellow above, with the sides above each in succession blacker to the fourth, the third and fourth with also a pale yellow spot, a tinge of fulvous colour on the three basal segments; beneath, the basal segment has a triangular white spot in the middle; the second segment is white, with a black spot in the middle of its base; the third segment with a transverse white spot on each side of its apical margin; the fourth segment with two minute spots at its apical margin.

Hab. Adelaide.

THYNNUS (AGRIOMYIA) TRYPHONOIDES.

Female. Length 3 lines.—Ferruginous, shining, the head sparingly punctured; the prothorax deeply excavated above; the metathorax transverse and abruptly truncate; the abdomen delicately punctured.

Hab. Adelaide.

The male of this species is described at p. 34.

THYNNUS (AGRIOMYIA) FLAVESCENS.

Male. Length 4½ lines.—Head black; the orbits of the eyes, a V-shaped mark between the antennæ, the clypeus and mandibles, yellow. Thorax yellow; three black spots on the prothorax; a broad stripe on each side of the mesothorax, a bilobed spot in front, a large spot beneath the wings, and the pectus, black; the scutellum and metathorax yellow, both black at the base, the latter has also a black spot in the middle; the tibiæ and femora ferruginous, with the tarsi dusky; wings hyaline, the nervures black. The abdomen yellow, with a black band at the base of the segments, which is produced into an angular point in the middle; each segment has also a short narrow transverse line on each side; the black band broadest on the apical segments.

Female. Length 2¼ lines.—Yellow, with the head obscure rufo-fuscous; the metathorax black, transverse, with its margins

rounded. The apical margins of the first and second segments of the abdomen elevated into sharp carinæ, also a sharp transverse carina in the middle of the second segment.

Hab. Adelaide.

ÆLURUS INCANUS.

Female. Length $4\frac{1}{4}$ lines.—Black, closely punctured; the vertex shining and sparingly punctured; the antennæ and legs ferruginous; thinly sprinkled with erect glittering hairs; the thorax deeply constricted in the middle; the metathorax obliquely truncate, closely punctured and subopake; the terminal segment of the abdomen acute at its apex, which is pale testaceous, and thickly covered with fulvous hairs.

Hab. Adelaide.

The male of this species is described at p. 53.

RHAGIGASTER COMPARATUS.

Male. Length 5 lines.—Black: head and thorax coarsely rugose; the abdomen closely punctured, each segment with an oblique shining impunctate raised space on each side; the two apical segments ferruginous, and not so closely punctured as the preceding; covered with a scattered griseous pubescence; the wings hyaline, the nervures black; the tibiæ and tarsi obscure ferruginous; the segments of the abdomen constricted.

Female. Length $3\frac{1}{2}$ lines.—Black, elongate and narrow, strongly punctured; the antennæ, legs, and two apical segments of the abdomen ferruginous; the thorax rounded anteriorly; the metathorax narrowed at its base and obliquely truncate at the apex.

Hab. Adelaide.

This species very closely resembles *R. hæmorrhoidalis*; but in that species the apical margin of the terminal segment of the abdomen is deeply emarginate in the middle, in the present species it is rounded and entire; the legs are also of a different colour.

EXPLANATION OF THE PLATES.

PLATE I.

Fig.
1. *Dorylus Hindostanus.*
2. *Rhogmus fimbriatus.*
3. *Labidus Burchellii.*
4. *Ænictus certus.*
5. Node of the abdomen of *Dorylus helvolus.*
6. Node of the abdomen of *Dorylus affinis.*
7. Node of the abdomen of *Dorylus nigricans.*
8. Node of the abdomen of *Dorylus glabratus.*
9. Node of the abdomen of *Dorylus Juvenculus.*

Fig.
10. Node of the abdomen of *Dorylus labiatus.*
11. Node of the abdomen of *Dorylus orientalis.*
12. Node of the abdomen of *Dorylus longicornis.*
13. Node of the abdomen of *Dorylus attenuatus.*
14. Node of the abdomen of *Dorylus atriceps.*
15. Node of the abdomen of *Dorylus atratus.*
16. Node of the abdomen of *Dorylus Hindostanus.*

In this Plate the nodes of the abdomen are figured in profile, and are reversed, to show the form of the scale, or flattened process, in the different species, which apparently forms a good distinctive specific character.

PLATE II.

1. Anterior wing of *Labidus Jurinii.*
2. Anterior wing of *Labidus Panzeri.*
3. Anterior wing of *Labidus Illigeri.*
4. Anterior wing of *Labidus atriceps.*
5. Anterior wing of *Labidus Hopei.*
6. Anterior wing of *Labidus Klugii.*
7. Anterior wing of *Labidus Romandii.*
8. Anterior wing of *Labidus Swainsonii.*
9. Anterior wing of *Labidus Guerinii.*
10. Anterior wing of *Labidus Servillei.*
11. Anterior wing of *Labidus Burchellii.*
12. Anterior wing of *Labidus Halidaii.*

PLATE II. (*continued*).

Fig.
12*a*. Node of the abdomen of *Labidus Halidaii*.
13. Anterior wing of *Labidus morosus*.
13*a*. Node of the abdomen of *Labidus morosus*.
14. Anterior wing of *Labidus amplipennis*.
14*a*. Node of the abdomen of *Labidus amplipennis*.

Fig.
15*a*. *Ænictus inconspicuus*. *b*. Antennæ of ditto. *c*. Node of the abdomen of ditto.
16. Node of the abdomen of *Ænictus ambiguus*.
17. Node of the abdomen of *Ænictus pubescens*.

PLATE III.

1. *Thynnus variabilis* ♂.
2. *Thynnus variabilis* ♀.
3. Labial palpi of *Thynnus variabilis*.
4. Maxillary palpi of *Thynnus variabilis*.
5. Anterior wing of *Anthobosca*.
6. *Ælurus basalis* ♂.
7. *Ælurus nasutus* ♀.
8. Labial palpi of *Ælurus clypeatus*.
9. Maxillary palpi of *Ælurus clypeatus*.
10. *Tachypterus crassicornis* ♂.
11. Labial palpi of *Ælurus clypeatus*.
12. Maxillary palpi of *Ælurus clypeatus*.
13. *Ariphron bicolor* ♀.
14. Wing of *Rhagigaster*.
15. *Oncorhinus xanthospilos* ♂.
16. *Thynnus* (*Agriomyia*) *hæmatodes* ♂.

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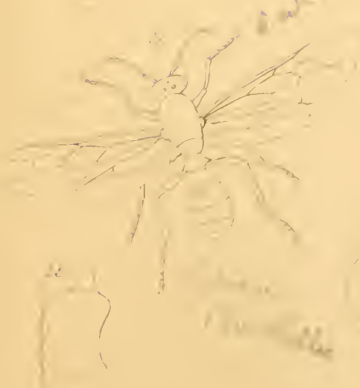
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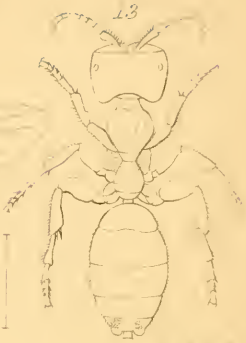
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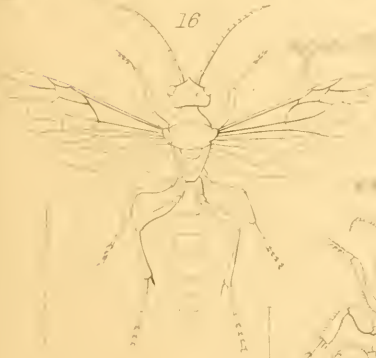
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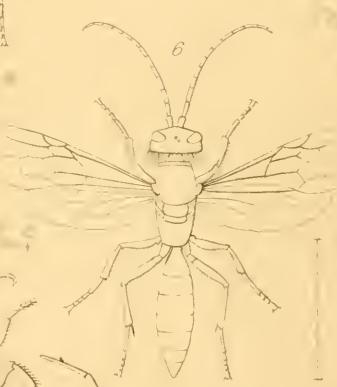
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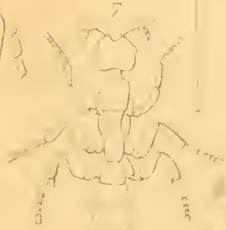
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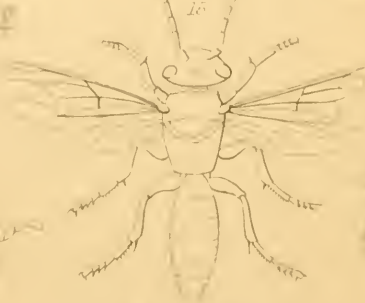
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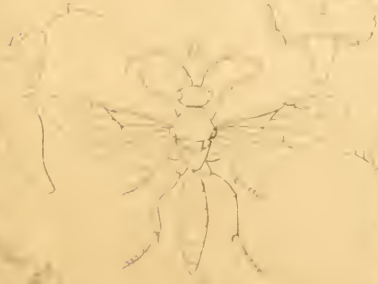
17

11

INDEX.

abdominalis (Ælurus), 53.
abdominalis (Agriomyia), 53.
adustus (Thynnus), 43.
Ælurus, 53.
Ænictus, 9.
æthiops (Thynnus), 50.
affinis (Dorylus), 2.
affinis (Thynnus), 12.
agilis (Thynnus), 19.
Agriomyia, 10.
albo-maculatus (Thynnus), 27.
albo-pictus (Thynnus), 26.
ambiguus (Ænictus), 9.
ambiguus (Labidus), 9.
amplipennis (Labidus), 6.
amplipennis (Thynnus), 53.
analis (Rhagigaster), 61.
analis (Thynnus), 49.
anilitatis (Thynnus), 37.
annulatus (Thynnus), 14.
Anthobosca, 59.
anthracinus (Thynnus), 50.
apicalis (Rhagigaster), 63.
apicalis (Thynnus), 47.
aptera (Myzine), 12.
apterus (Rhagigaster), 61.
apterus (Thynnus), 12.
Ariphron, 58.
assimilis (Thynnus), 19.
ater (Thynnus), 47.
atratus (Dorylus), 4.
atriceps (Labidus), 5.
attenuatus (Dorylus), 3.
attenuatus (Thynnus), 42.
aurifrons (Ælurus), 54.
Australasiæ (Anthobosca), 59.
australis (Thynnus), 14.
barbatus (Ælurus), 57.
basalis (Ælurus), 55.
basalis (Thynnus), 23.
Bethylus, 60.
bicolor (Ariphron), 58.
bicolor (Diamma), 65.
bicolor (Thynnus), 40.
bidentatus (Thynnus), 32.
binotatus (Rhagigaster), 61.
brevicornis (Thynnus), 39.
Brownii (Thynnus), 14.
Burchellii (Labidus), 5.
calcaratus (Thynnus), 40.
carbonarius (Thynnus), 23.
carinatus (Thynnus), 29.
castaneus (Rhagigaster), 63.
Catocheilus, 10.
Cerceroides (Thynnus), 34.
certus (Ænictus), 9.
chalybeus (Trachypterus), 64.
clitellatus (Thynnus), 50.
clypeatus (Ælurus), 58.
cognatus (Thynnus), 28.
collaris (Thynnus), 40.
combustus (Ælurus), 55.
combustus (Thynnus), 32.
comparatus (Rhagigaster), 69.
compressus (Thynnus), 43.
confusus (Thynnus), 13.
connectens (Thynnus), 45.
consanguineus (Thynnus), 24.
consobrinus (Thynnus), 48.
constrictus (Thynnus), 19.
cornutus (Thynnus), 47.
Crabroniformis (Anthobosca), 59.

Crabroniformis (Thynnus), 36.
crassicornis (Tachypterus), 64.
crassipes (Thynnus), 44.
cryptoides (Thynnus), 33.
decipiens (Thynnus), 18.
decorus (Thynnus), 51.
dentatus (Ælurus), 57.
dentatus (Thynnus), 11.
depressus (Thynnus), 11, 23.
Diamma, 60, 65.
dilatatus (Thynnus), 43.
dimidiatus (Rhagigaster), 62.
dimidiatus (Thynnus), 17, 47.
dispar (Erione), 41.
dispar (Thynnus), 41.
distinctus (Thynnus), 40.
diversus (Thynnus), 41.
D'Orbignii (Labidus), 8.
Dorylidæ. 1.
Dorylus, 1.
elegans (Thynnus), 51.
emarginatus (Thynnus), 16.
Enteles, 10.
ephippiger (Rhagigaster), 61.
Erichsonii (Labidus), 9.
Erione, 10.
Esenbeckii (Labidus), 7.
fallax (Thynnus), 35.
Fargeavii (Labidus), 4.
fasciatus (Thynnus), 47.
fasciatus (Trachypterus), 64.
fenestratus (Thynnus), 18.
fervens (Ælurus), 58.
fervens (Thynnus), 31.
fervidus (Thynnus), 18, 53.
fimbriatus (Rhogmus), 4.
fimbriatus (Thynnus), 42.
flavescens (Thynnus), 68.
flavilabris (Thynnus), 17, 18.
flavipennis (Thynnus), 21.
flaviventris (Thynnus), 16.
flavo-fasciatus (Thynnus), 45.
flavo-guttatus (Thynnus), 12.
flavopictus (Thynnus), 21.
Fonscolombii (Labidus), 8.
frontalis (Thynnus), 48.
fulvifrons (Ælurus), 56.
fulvipes (Thynnus), 22.
fumipennis (Thynnus), 22.
glabratus (Dorylus), 2.
gracilis (Thynnus), 22.
gratiosus (Thynnus), 52.
Gravenhorstii (Labidus), 8.
gravidus (Thynnus), 18.
Grayii (Thynnus), 14.
Guerinii (Labidus), 8.
Guerinii (Thynnus), 17.
hæmatodes (Thynnus), 59.
hæmorrhoidalis (Rhagigaster), 62.
hæmorrhoidalis (Thynnus), 49.
Halidaii (Labidus), 8.
Hartigii (Labidus), 7.
helvola (Mutilla), 1.
helvola (Vespa), 1.
helvolus (Dorylus), 1.
Hindostanus (Dorylus), 3.
histrio (Thynnus), 50.
Hopei (Labidus), 8.
humilis (Thynnus), 19.
hyalinatus (Thynnus), 16.
ichneumoneus (Thynnus), 48.
ichneumoniformis (Thynnus), 39.
Illigeri (Labidus), 7.
incanus (Ælurus), 53, 69.
inconspicuus (Ænictus), 10.
inconstans (Thynnus), 26.
insignis (Thynnus), 15.
integer (Rhagigaster), 60.
intermedius (Thynnus), 49.
interruptus (Thynnus), 48.
intricatus (Thynnus), 30.
iridipennis (Thynnus), 38.
Iswara, 65.
jucundus (Thynnus). 25.
Jurinii (Labidus), 5.
Juvenculus (Dorylus), 2.
Klugii (Labidus), 9.
Klugii (Thynnus), 17.
labiatus (Dorylus), 2.
labiatus (Thynnus), 22.
Labidus, 4.
lætus (Thynnus), 51.
læviceps (Thynnus), 44.
lævifrons (Thynnus), 45.
lateralis (Thynnus), 50.
Latreillii (Labidus), 5.
Latreillii (Thynnus), 48.
Leachiellus (Thynnus), 17.
lepidus (Thynnus), 49.
longiceps (Thynnus), 46.

longicornis (Dorylus), 3.
Lophocheilus, 10.
lucidus (Thynnus), 36.
luctuosus (Thynnus), 26.
luteus (Iswara), 65.
maculatus (Thynnus), 24.
maculipennis (Thynnus), 47.
maculosus (Thynnus), 16.
mandibularis (Rhagigaster), 61.
marginalis (Thynnus), 24.
marginilabris (Thynnus), 24.
maurus (Thynnus), 37.
melleus (Thynnus), 24, 67.
Mexicanus (Labidus), 7.
minutus (Thynnus), 35.
modestus (Thynnus), 19.
mœrens (Ælurus), 53.
mœstus (Thynnus), 36.
molitor (Thynnus), 43.
monilicornis (Thynnus), 39.
Morio (Rhagigaster), 61.
morosus (Labidus), 6.
Mutilla, 1, 10.
Myrmecodes, 10.
Myrmecodes (Mutilla), 16.
mystacinus (Thynnus), 49.
Myzine, 10.
nasutus (Ælurus), 58.
niger (Thynnus), 30.
nigra (Anthobosca), 59.
nigricans (Dorylus), 2.
nigriceps (Thynnus), 46.
nitidus (Rhagigaster), 63.
nitidus (Thynnus), 30.
obscuripennis (Thynnus), 13.
obscurus (Thynnus), 23.
obtusus (Rhagigaster), 62.
odyneroides (Thynnus), 24.
Olivieri (Thynnus), 12, 18.
Oncorhinus, 64.
optimus (Thynnus), 29.
orientalis (Dorylus), 3.
ornatus (Thynnus), 49.
pallidipennis (Thynnus), 47.
pedestris (Thynnus), 16.
Pertii (Labidus), 9.
petiolatus (Thynnus), 36.
philanthoides (Thynnus), 51.
picipes (Thynnus), 17.
pilosulus (Ælurus), 56.
pilosus (Labidus), 7.
plagiatus (Thynnus), 52.
planifrons (Thynnus), 46.
Psammatha, 64.
pubescens (Ænictus), 10.
pubescens (Thynnus), 49.
pugionatus (Thynnus), 22.
pulchellus (Thynnus), 25.
pulchralis (Thynnus), 68.
punctatus (Thynnus), 44.
purpureipennis (Thynnus), 18.
quadratus (Thynnus), 42.
quadricinctus (Thynnus), 50.
reflexus (Rhagigaster), 62.
Rhagigaster, 60.
Rhogmus, 4.
Romandii (Labidus), 9.
rotundiceps (Thynnus), 46.
rubellus (Ælurus), 56.
rubellus (Thynnus), 25.
rubripes (Thynnus), 22.
ruficeps (Thynnus), 48.
ruficornis (Rhagigaster), 61.
ruficornis (Thynnus), 34.
rufipes (Thynnus), 46.
rufiventris (Thynnus), 13.
Scoliæformis (Thynnus), 48.
scutellaris (Thynnus), 51.
sedulus (Thynnus), 35.
senex (Ælurus), 54.
senex (Thynnus), 19.
senilis (Thynnus), 25.
serripes (Thynnus), 44.
Servillei (Labidus), 5.
sexmaculatus (Thynnus), 32.
Shuckardi (Thynnus), 17.
signatus (Thynnus), 44.
similis (Thynnus), 15.
simillimus (Thynnus), 15.
sphegeus (Thynnus), 50.
Spinolæ (Labidus), 8.
sulcatus (Thynnus), 42.
sulcifrons (Thynnus), 43.
Swainsonii (Labidus), 8.
Tachypterus, 64.
tarsatus (Thynnus), 51.
tenuatus (Thynnus), 24.
Thynnidæ, 10.
Thynnus, 10.
Tiphia, 10.

tricolor (Thynnus), 46.
trifasciatus (Thynnus), 49.
trifidus (Thynnus), 24.
tristis (Rhagigaster), 63.
tristis (Thynnus), 34.
trisulcatus (Thynnus), 45.
trivialis (Thynnus), 34.
trochanterinus (Thynnus), 23.
truncatus (Thynnus), 38.
Tryphonoides (Thynnus), 34, 68.
tuberculatus (Thynnus), 41.
tuberculiventris (Thynnus), 17.
umbripennis (Thynnus), 31.
unicolor (Rhagigaster), 61.
varia (Myrmecoda), 48.
variabilis (Thynnus), 12.
variegatus (Thynnus), 24.
varipes (Anthobosca), 59.
varipes (Thynnus), 67.
varius (Thynnus), 48.
versicolor (Thynnus), 50.
Vespa, 1.
vestitus (Thynnus), 15.
vigilans (Thynnus), 28.
villosus (Thynnus), 40.
vinculatus (Thynnus), 49.
vitripennis (Thynnus), 41.
volatilis (Thynnus), 33.
vulpinus (Ælurus), 54.
vulpinus (Thynnus), 50.
Walkeri (Labidus), 9.
Wallisii (Thynnus), 14.
Westwoodii (Thynnus), 24.
Xanthorrhœi (Thynnus), 28.
xanthospilos (Oncorhinus), 65.
zonatus (Thynnus), 12.

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